

TRAFFIC SPEED REPORT NO. 86

SEPTEMBER 1968

NO. 17

Joint
Highway
Research
Project

PURDUE UNIVERSITY
LAFAYETTE INDIANA

by

S.S. HEJAL

TRAFFIC SPEED REPORT NO. 86

To: J. F. McLaughlin, Director
Joint Highway Research Project

From: H. L. Michael, Associate Director
Joint Highway Research Project

September 12, 1968

File: 8-3-5

Project: C-56-100

The attached Progress Report No. 86 on Traffic Speeds is the report of the 1968 study of free-flowing automobile and truck speeds on rural, tangent, level sections of Interstate, other 4-lane and 2-lane highways in Indiana. The study and report have been performed by Mr. Salim S. Hajal, a Graduate Instructor in Research on our staff, under the direction of Professor Michael.

The results indicate similar average speeds for all passenger cars and an increase of about 1.5 mph for all heavy trucks to those speeds noted in the 1967 study. A regression analysis of the speed data for the past eleven years indicated that the speed trend for all classes of vehicles on all classes of highway studied is an increasing one. Average speeds for passenger cars over all classes of highway have increased 0.85 mph annually and for all heavy trucks over all classes of highway the increase has been 0.87 mph annually.

Copies of this report are requested for release to the Indiana State Police, the Indiana Traffic Safety Council and the Indiana Office of Traffic Safety as is normal procedure for these reports. Copies will also be sent to the Bureau of Public Roads and several Departments within the ISHC. The report is presented for the record and for release as noted.

Respectfully submitted,

Harold L. Michael
Harold L. Michael
Associate Director

HLM:lh

Attachment

Copy: F. L. Ashbaucher	R. H. Harrell	C. F. Scholer
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Progress Report

TRAFFIC SPEED REPORT NO. 86

by

Salim S. Hejal
Graduate Assistant

Joint Highway Research Project

File No.: 8-3-3

Project No.: C-36-100

Purdue University
Lafayette, Indiana
September 12, 1968

ABSTRACT

This report is the annual continuing study of the speeds of vehicles on rural Indiana highways. Observations of spot speeds were taken on interstate, other four lane, and two lane highways throughout the state during the months of June and July, 1968.

Analysis of the speeds showed the over-all average speed for passenger cars was 64.5 miles per hour. The over-all average speeds for trucks on the three types of highways was 56.5 miles per hour.

A regression analysis on the available results of the past eleven years showed an annual increase of 0.85 miles per hour for the over-all average speed of passenger cars and 0.87 miles per hour for the over-all average speed of heavy trucks.

TRAFFIC SPEED REPORT NO. 86

This report is an analysis of spot speed observations made during June and July 1968. All observations were made of free-flowing vehicles on level, tangent sections of rural Indiana highways during daylight and under favorable weather conditions. The same locations on selected Federal and State highways as used in 1967 were used again. Most of these locations have been the same for many years. Stations were classified as - two lane, four lane, or interstate highways. A representative sample of traffic speeds was obtained at each of the four stations in each classification. The specific site of each station was as follows: (see Figure A)

Interstate Highways

1. I-69 3.3 Miles South of Junction of S. R. 18
2. I-65 1.0 Miles West of Junction of S. R. 334
3. I-74 1.0 Mile East of Junction of Post Road
4. I-65 2.9 Miles North of Junction of S. R. 160

Four Lane Highways

5. U. S. 31 1.2 Miles South of Junction of S. R. 38
6. U. S. 52 1.0 Mile East of Junction of S. R. 28
7. U. S. 41 1.0 Mile North of South Junction of S. R. 2
8. U. S. 52 1.0 Mile West of Klondike

Two Lane Highways

9. U. S. 41 1.0 Mile North of Boswell
10. S. R. 43 2.0 Miles South of Chalmers
11. U. S. 31 3.0 Miles South of Rochester
12. S. R. 25 0.7 Miles West of Americus

The vehicles were classified as passenger cars or trucks. Passenger cars were further classified into two groups - Indiana or Non-Indiana and the analysis was performed as thus classified and combined. The trucks were also classified into two groups - Light (less than 5000 pounds gross weight) or Heavy (equal to or more than 5000 pounds gross weight), and again the analysis was performed as classified and combined.

The maximum speed limits in Indiana are as follows: 70 miles per hour on interstate highways and 65 miles per hour on other highways, unless otherwise posted. This is the second year that truck speed limits were the same as passenger cars. The stated maximum speed limits were applicable at all interstate, four lane and two lane stations of this study.

Equipment and Field Procedure

The observations for this report were obtained by use of an "Electronic" Radar Speed Meter, built by Automatic Signal Division, Eastman Industries, Inc., East Norwalk, Connecticut. The meter was placed approximately four feet from the edge of the pavement at an angle less than 10° with the highway center line. Speed inaccuracies are negligible at small angles (less than 10°) and therefore, corrections for angle were unnecessary.

At the beginning of the study the accuracy of the meter was checked; a constant discrepancy of minus two miles per hour was found and hence all readings of speed were corrected accordingly.

Results of Analysis

The data collected were analyzed and are summarized in Tables 1 to 12 in the Appendix. Tables 13, 14, and 15 summarize the data for

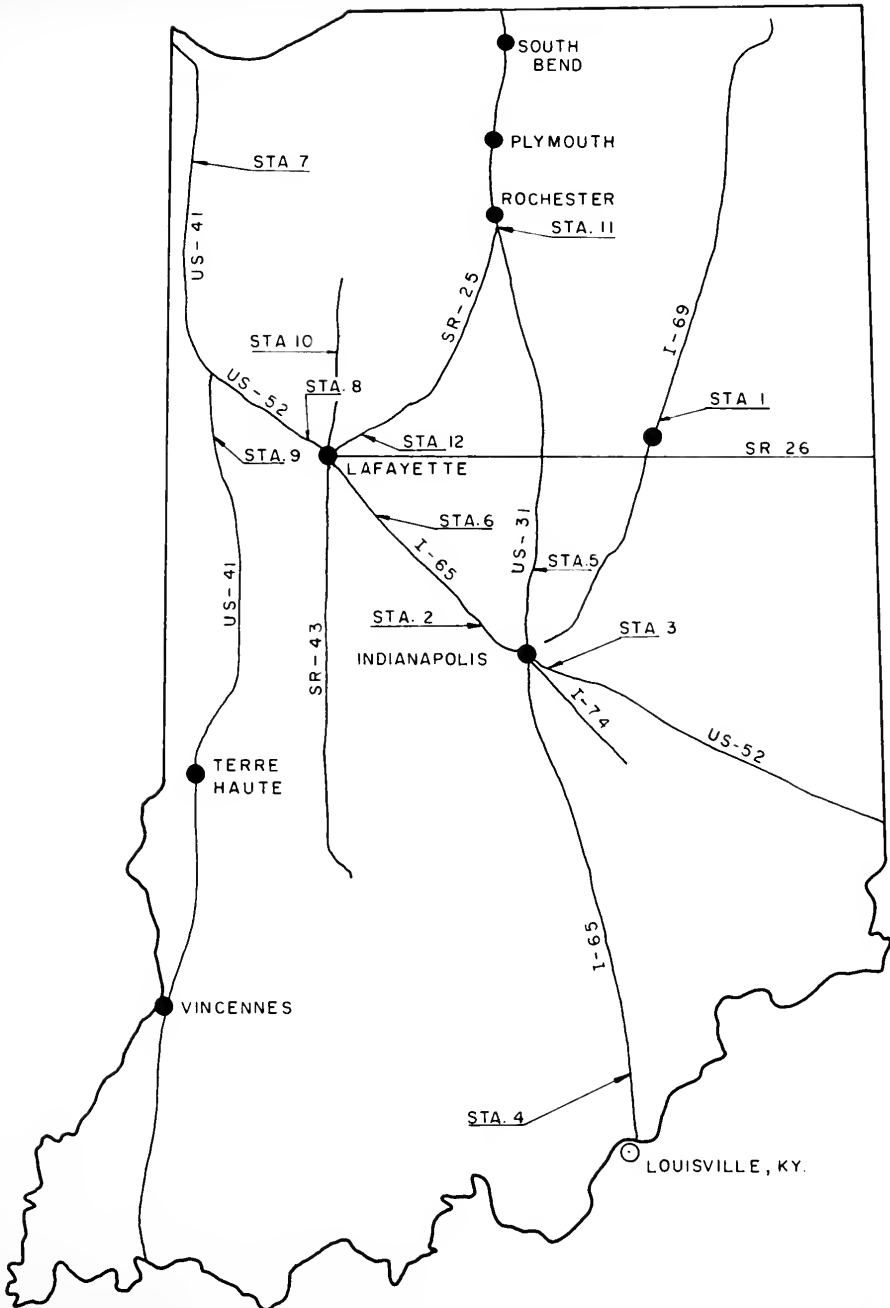


FIG. A - LOCATIONS OF SPEED-STUDY STATIONS

are three types of facilities: Interstate, State, and Local. Table 16 is the summary for all facilities combined.

Figures 1 to 16 in the Appendix show the percentage of vehicles for each of the stations studied.

The average speed for each class of vehicle traveling on each type of highway for this study was as follows:

	Interstate	State	Local
<u>Passenger cars:</u>			
Indiana	64.1	61.1	61.2
Non-Indiana	64.8	61.4	61.4
85 percentile (all)	78.1	69.7	68.1
<u>Trucks:</u>			
Less than 5000 lbs.	54.7	57.4	57.4
5000 lbs. or more	57.1	61.3	61.4

The percent of vehicles exceeding 55 mph on each type of highway for each type of vehicle and each type of highway was as follows:

	Interstate	State	Local
<u>Passenger cars:</u>			
Indiana	23.1	21.6	21.7
Non-Indiana	24.2	21.0	21.2
<u>Trucks:</u>			
Less than 5000 lbs.	1.4	1.1	1.2
5000 lbs. or more	0.5	0.7	0.7

The percent of vehicles traveling 5 miles per hour or less below the speed limit for each case was as follows:

Passenger cars:

Indiana

1.0

1.0

Non-Indiana

3.0

3.5

Trucks:

less than 5000 lbs.

1.0

5000 lbs. or more

0.5

0.5

The results of this study are summarized in Table 1. The results are presented in Table 1. The results are presented in Table 1.

The hypothesis $H_0: \mu = 0$ was tested against the alternative hypothesis $H_a: \mu \neq 0$ using a two-tailed test. The results of the test are presented in Table 1. The results of the test are presented in Table 1.

A graphical representation of the results is shown in Figure 1.

Table B Summary of Linear Regression Analysis

Classification	No of Observ.	b_0	b_1	R^2	S_{est}	Hypothesis Testing	
						$\beta = 0.0$	$\beta = 1.0$
Interstate Passenger Cars 85%	8	-9.63	1.213	.767	.253	S ^{NS}	NS ^{NS}
4 Lane Passenger Auto Reg.	11	24.00	0.000	.802	.024	S [*]	S [*]
2 Lane Passenger Cars 85%	11	23.36	.665	.676	.064	S [*]	S [*]
Mean of All Passenger Cars	11	6.27	.971	.907	.029	S [*]	NS ^{NS}
Mean of all Light Trucks	11	24.02	0.401	.504	.079	S [*]	S [*]
Mean of all Heavy Trucks	11	-3.50	.677	.341	.129	S [*]	NS ^{NS}
Interstate Heavy Trucks 15%	8	-23.43	1.110	.921	.133	S [*]	NS ^{NS}
4 Lane Heavy Trucks 15%	11	6.03	0.000	.764	.130	S [*]	S [*]
2 Lane Heavy Trucks 15%	10	5.79	0.770	.764	.130	S [*]	NS ^{NS}

* Significant @ 5% level of significance

NS Not Significant @ 5% level of significance

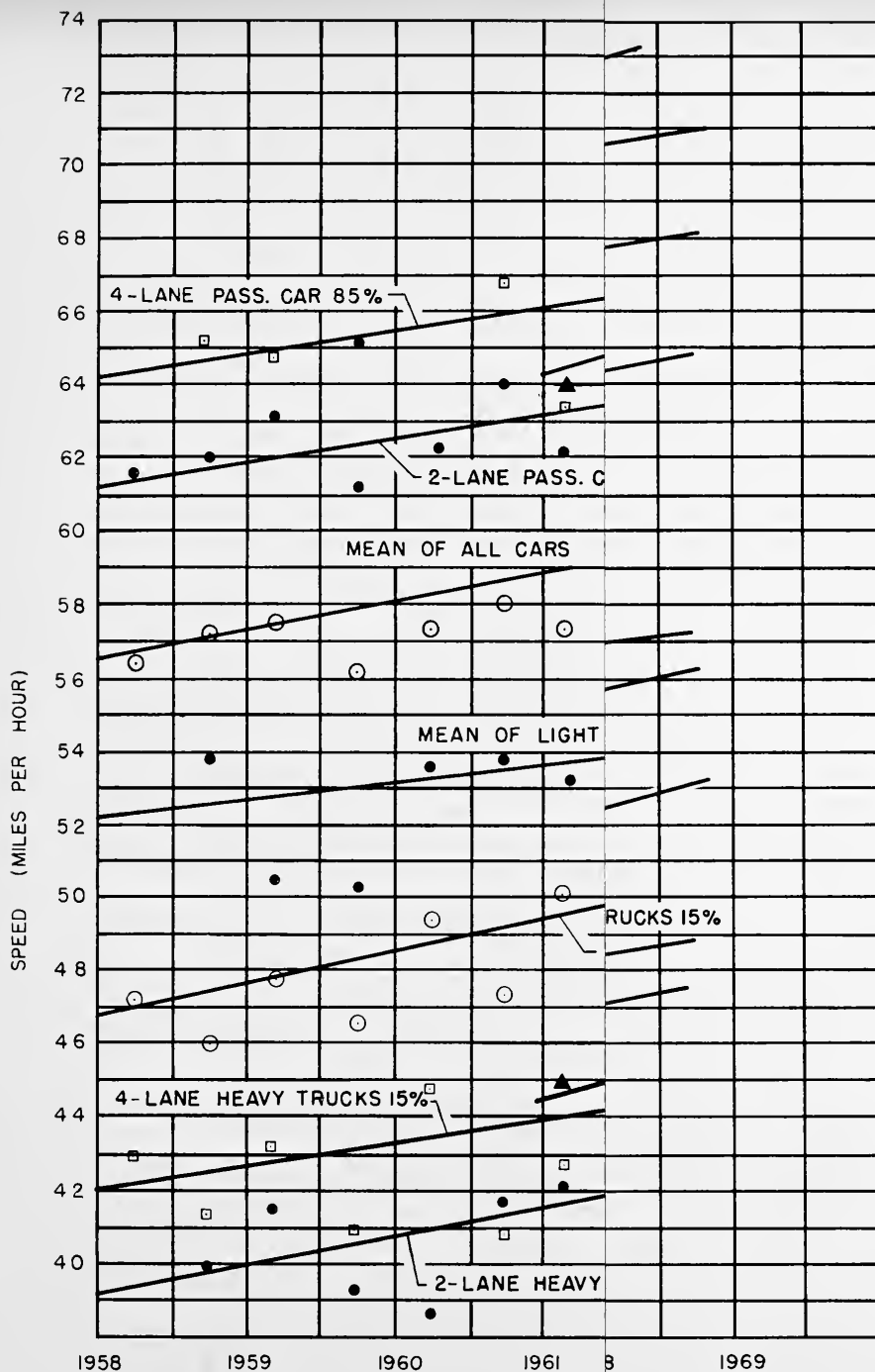


FIG. B - IN



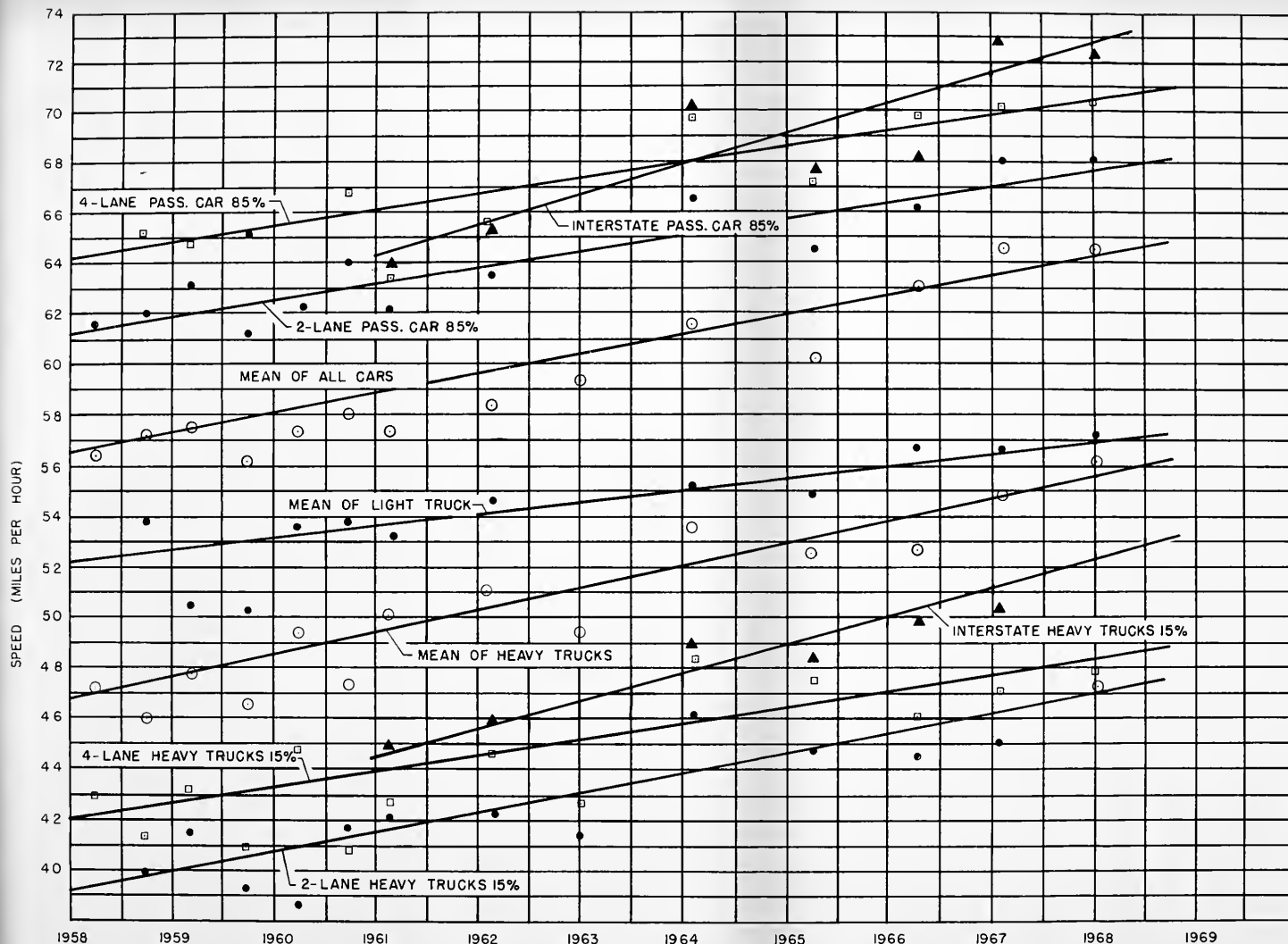


FIG.B- INDIANA RURAL SPEED TRENDS 1958-1968

Summary and Conclusions

The average speeds in this study were found to be similar for passenger cars and 1.5 miles per hour faster for trucks than the results of the previous year.

The linear regression on the results of the past ten years proved that there has been a definite increase in speeds for all vehicle and highway classifications studied. The annual trend for different speed characteristics such as 85 percentiles, average speeds, and 15 percentiles for passenger cars, light trucks and heavy trucks on the three classes of highways ranged between 0.46 and 1.21 miles per hour increase annually. For all passenger cars the annual increase was found to be 0.85 miles per hour for average speed and for all heavy trucks the annual increase in average speed was found to be 0.67 miles per hour.

It is interesting to note that although the speed limits for heavy trucks was increased by 15 m.p.h. to the speed limits for automobiles on the highways of Indiana a year and a half ago, no large increase has occurred in actual truck speeds. The effect of the change in speed limits for heavy trucks on actual speed appears to be negligible. In other words, trucks travel at speeds their drivers consider safe, irrespective of maximum speed limits. The growing percentage of automobiles violating current maximum speed limits especially on four-lane highways, tends to support a similar statement, namely that their drivers also select their travel speeds in the same manner.

It is ... that a ...
 the speed of ...
 for ...
 low ...

Assuming a normal distribution ...
 derivation of the grouped ...
 requirements are determined ...

$$s = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n}}$$

N = sample size required
 s = substituted value in ...
 s = estimated standard deviation
 L = width of the interval

For ...

$$N = \left(\frac{2 \times 1.96 \times 7}{L} \right)^2$$

For ...

$$n = \left(\frac{1.96 \times 2.5}{L} \right)^2$$

All ...
 ...



TABLE 1 SPEED DATA

Station 1 Highway I-69 Location 3.3 Miles South of S.R. 18

No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Cloudy
 Date July 2, 1968 Last Previous Observation (Speed Report No. 85)
 Time 9:30-11:30 A.M. Date August 22, 1967
 Time 10:15 A.M.-12:45 P.M.

PASSENGER CARS				TRUCKS			
OBSERVATION	All		Indiana		Non-Indiana		5000 pounds or more
	Last	Present	Last	Present	Last	Present	
No. of vehicles obs.	240	216	169	142	71	74	83 93 15 12 73 81
Average speed (m.p.h.)	67.8	67.4	67.4	66.7	63.7	68.7	57.1 53.8 60.9 60.5 56.8 58.6
Standard deviation	6.63	6.40	6.55	6.06	6.79	6.84	6.02 6.54 8.73 9.89 5.12 5.54
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0 0.0 0.0 0.0 0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0 0.0 0.0 0.0 0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0 0.0 0.0 0.0 0.0
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0 0.0 0.0 0.0 0.0
44 m.p.h.	0.0	0.5	0.0	0.7	0.0	0.0	0.0 1.1 0.0 0.0 0.0 1.2
49 m.p.h.	0.0	1.4	0.0	1.4	0.0	1.4	2.3 3.2 0.0 8.3 2.7 2.5
54 m.p.h.	2.1	4.2	1.8	4.2	2.3	4.1	7.9 5.4 13.3 8.3 6.9 4.9
59 m.p.h.	10.8	9.3	11.2	9.2	9.9	9.5	31.8 20.4 26.7 16.7 32.9 21.0
64 m.p.h.	32.5	29.2	34.9	31.7	26.8	24.3	61.4 54.8 40.0 58.3 65.8 54.3
69 m.p.h.	60.8	63.0	63.9	69.7	53.5	50.0	90.9 86.0 66.7 75.0 95.9 87.7
74 m.p.h.	85.0	90.3	86.4	93.0	81.7	85.1	97.7 97.9 86.7 91.7 100.0 98.8
79 m.p.h.	95.4	96.8	95.9	98.6	94.4	93.2	98.9 97.9 93.3 91.7 - 98.8
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0 98.9 100.0 91.7 - 100.0
89 m.p.h.	-	-	-	-	-	-	- 100.0 - - -
No. of vehicles obs.	-	108	-	70	-	38	- 49 - 9 - 40
Average speed	-	67.8	-	67.3	-	68.6	- 59.7 - 60.4 - 59.5
No. of vehicles obs.	-	108	-	72	-	36	- 44 - 3 - 41
Average speed	-	67.0	-	66.1	-	68.9	- 57.9 - 61.0 - 57.6

TABLE 3 SPEED DATA

Station 3 Highway I-74 Location 1.0 Mile East of Post Road

No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Fair
 This Observation June 28, 1968 Last Previous Observation (Speed Report No. 85)
 Date June 28, 1968 Date August 23, 1967
 Time 3:00-10:30 A.M. Time 1:30-4:00 P.M.

PASSENGER CARS										TRUCKS					
OBSERVATION	All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more				
	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present			
No. of vehicles obs.	257	321	170	243	87	78	113	99	25	34	88	65			
Average speed (m.p.h.)	66.4	66.6	65.4	65.9	68.5	68.8	58.3	58.5	59.8	59.5	57.9	57.9			
Standard deviation	7.33	6.60	7.09	6.66	7.40	5.94	5.72	6.11	7.74	7.00	4.98	5.57			
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
44 m.p.h.	0.0	0.3	0.0	0.4	0.0	0.0	0.0	3.0	0.0	0.0	0.0	4.6			
49 m.p.h.	0.8	1.9	1.2	2.5	0.0	0.0	7.1	6.1	8.0	5.9	6.8	6.2			
54 m.p.h.	6.2	4.1	7.7	5.4	3.5	0.0	23.0	22.2	24.0	26.5	22.7	20.0			
59 m.p.h.	18.3	10.6	21.2	12.4	12.6	5.1	55.8	56.6	52.0	50.0	56.8	60.0			
64 m.p.h.	37.4	36.5	41.8	40.3	28.7	24.4	92.0	86.9	80.0	76.5	95.5	92.3			
69 m.p.h.	64.2	67.0	71.2	71.6	50.6	52.6	97.4	97.0	88.0	91.2	100.0	100.0			
74 m.p.h.	88.3	91.0	91.2	92.2	82.8	87.2	99.1	100.0	96.0	100.0	-	-			
79 m.p.h.	96.5	97.5	97.1	98.4	95.4	94.9	99.1	-	96.0	-	-	-			
84 m.p.h.	99.2	99.4	100.0	99.6	97.7	98.7	100.0	-	100.0	-	-	-			
89 m.p.h.	99.6	99.6	-	99.7	98.9	100.0	-	-	-	-	-	-			
No. of vehicles obs.	-	171	-	123	-	48	-	41	-	14	-	27			
Average speed	-	67.2	-	66.5	-	69.2	-	57.7	-	58.9	-	57.0			
No. of vehicles obs.	-	150	-	120	-	30	-	58	-	20	-	38			
Average speed	-	65.9	-	65.4	-	68.1	-	59.1	-	60.0	-	58.6			



TABLE 4 SPEED DATA

Station 4 Highway I-65 Location 7.5 Miles North S.R. 160

No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Cloudy
 This Observation June 27, 1968 Last Previous Observation (Speed Report No. 85)
 Date June 27, 1968 Date August 23, 1967
 Time 1:00-3:30 P.M. Time 8:50-11:15 A.M.

OBSERVATION		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles at or less than 24 m.p.h.	No. of vehicles obs.	270	323	145	154	125	169	130	127	21	29	109	98
	Average speed (m.p.h.)	67.8	66.8	67.4	66.3	68.3	67.2	56.1	58.4	58.5	62.2	55.6	57.3
	Standard deviation	6.50	6.01	6.01	6.46	7.02	5.72	6.15	5.25	6.53	5.33	5.98	4.67
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	44 m.p.h.	0.0	0.3	0.0	0.7	0.0	0.0	3.9	0.0	0.0	0.0	4.6	0.0
	49 m.p.h.	0.4	0.6	0.0	1.3	0.8	0.0	13.1	4.7	14.3	0.0	12.8	6.1
	54 m.p.h.	3.7	2.8	2.8	3.9	4.8	1.8	36.2	22.3	23.8	6.90	38.5	27.6
24 or less than 29 m.p.h.	59 m.p.h.	8.5	11.5	8.3	11.7	8.8	11.2	69.2	53.4	52.4	24.1	72.5	62.2
	64 m.p.h.	31.5	32.5	33.1	37.7	29.6	27.8	94.6	89.8	85.7	65.5	96.3	96.9
	69 m.p.h.	59.3	67.2	64.8	69.5	52.8	65.1	98.5	98.4	95.2	93.1	99.1	100.0
	74 m.p.h.	85.2	92.0	87.6	91.6	82.4	92.3	100.0	100.0	100.0	100.0	100.0	-
	79 m.p.h.	97.4	98.1	97.9	98.1	96.8	98.2	-	-	-	-	-	-
	84 m.p.h.	99.6	100.0	100.0	100.0	99.2	100.0	-	-	-	-	-	-
	89 m.p.h.	100.0	-	-	-	100.0	-	-	-	-	-	-	-
	No. of vehicles obs.	-	146	-	65	-	81	-	52	-	16	-	36
Bound Bound	Average speed	-	67.2	-	66.7	-	67.7	-	59.0	-	62.4	-	57.5
	No. of vehicles obs.	-	177	-	89	-	88	-	75	-	13	-	62
Bound Bound	Average speed	-	66.4	-	66.0	-	66.8	-	58.0	-	62.0	-	57.1



TABLE 5 SPEED DATA

Station 5 Highway U.S. 31 Location 1.2 Miles South of S.R. 38

No. of Lanes 4 Type of Surface Asphalt Concrete Weather Cloudy

This Observation June 26, 1968 Last Previous Observation (Speed report No. 85)

Date June 26, 1968 Date August 22, 1967

Time 1:30-4:30 P.M. Time 2:20-5:00 P.M.

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.	243	277	201	227	42	50	101	85	48	38	53	47
Average speed (m.p.h.)	65.0	64.7	64.5	64.3	67.4	66.2	55.9	56.4	57.8	59.1	53.0	54.3
Standard deviation	6.92	7.00	6.99	7.11	6.08	6.19	7.58	6.75	7.94	6.92	6.51	5.83
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.	0.0	0.4	0.0	0.4	0.0	0.0	1.0	0.0	0.0	0.0	1.9	0.0
44 m.p.h.	0.8	1.1	1.0	1.3	0.0	0.0	7.9	5.9	6.3	2.6	9.4	8.5
49 m.p.h.	2.1	2.2	2.5	2.2	0.0	2.0	25.7	16.5	20.8	10.5	30.2	21.3
54 m.p.h.	4.9	6.1	6.0	7.1	0.0	2.0	47.5	37.7	33.3	23.7	60.4	48.9
59 m.p.h.	17.3	20.6	19.9	22.0	4.8	14.0	67.3	71.8	54.2	52.6	79.3	87.2
64 m.p.h.	45.3	49.8	48.3	52.0	31.0	40.0	88.1	87.1	77.1	76.3	98.1	95.7
69 m.p.h.	76.9	76.9	79.1	79.7	66.7	64.0	98.0	96.5	95.8	92.1	100.0	100.0
74 m.p.h.	93.4	94.2	94.5	93.8	88.1	96.0	100.0	100.0	100.0	100.0	-	-
79 m.p.h.	97.5	98.2	97.5	97.8	97.6	100.0	-	-	-	-	-	-
84 m.p.h.	99.2	99.2	99.5	99.1	97.6	-	-	-	-	-	-	-
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	-	-	-	-	-	-	-
No. of vehicles obs.	-	124	-	106	-	18	-	29	-	13	-	16
Average speed	-	65.0	-	64.6	-	67.7	-	56.8	-	58.9	-	55.1
No. of vehicles obs.	-	153	-	12	-	32	-	56	-	25	-	31
Average speed	-	64.4	-	64.1	-	65.4	-	56.2	-	59.2	-	53.8



TABLE 6 SPEED DATA

Station 6 Highway U.S. 52 Location 1.0 Mile East of S.R. 28 Weather Cloudy
 No. of Lanes 4 Type of Surface Asphaltic Concrete Last Previous Observation (Speed Report No. 85)
 Date June 28, 1968 Date August 26, 1967
 Time 1:00-3:30 P.M. Time 10:30 A.M.-12:50 P.M.

PASSENGER CARS				TRUCKS			
OBSERVATION	All		Indiana		Non-Indiana		5000 pounds or more
	Last	Present	Last	Present	Last	Present	
No. of vehicles obs.	249	308	124	196	125	112	5000 pounds or more
Average speed (m.p.h.)	65.8	65.9	65.4	65.1	66.0	67.1	Last Present
Standard deviation	5.76	5.48	6.14	5.45	5.36	5.33	Last Present
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	Last Present
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	Last Present
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	Last Present
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	Last Present
44 m.p.h.	0.8	0.0	1.6	0.0	0.0	0.0	Last Present
49 m.p.h.	0.8	0.0	1.6	0.0	0.0	0.0	Last Present
54 m.p.h.	4.4	2.3	4.8	3.1	4.0	0.9	Last Present
59 m.p.h.	11.2	10.4	12.1	12.2	10.4	7.1	Last Present
64 m.p.h.	37.0	41.9	38.7	48.5	35.2	30.4	Last Present
69 m.p.h.	75.1	74.0	75.0	77.6	75.2	67.9	Last Present
74 m.p.h.	96.4	95.5	96.0	96.9	95.8	92.9	Last Present
79 m.p.h.	99.2	99.0	100.0	99.5	98.4	98.2	Last Present
84 m.p.h.	100.0	99.7	-	99.5	100.0	100.0	Last Present
89 m.p.h.	-	100.0	-	100.0	-	-	Last Present
No. of vehicles obs.	-	148	-	105	-	43	Last Present
Average speed	-	66.6	-	65.8	-	68.5	Last Present
No. of vehicles obs.	-	160	-	91	-	69	Last Present
Average speed	-	65.2	-	64.4	-	66.3	Last Present



TABLE 7 SPEED DATA

Station 7 Highway U.S. 41 Location 1.0 Mile North of S.R. 2

No. of Lanes 4 Type of Surface Portland Cement Concrete Weather Fair
 Date July 1, 1968 Last Previous Observation (Speed Report No. 85)
 Time 2:00-4:30 P.M. Date August 28, 1967 Time 2:30-4:00 P.M.

OBSERVATION				PASSENGER CARS				TRUCKS			
				All		Indiana		Non-Indiana		All	
No. of vehicles	obs.	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.		197	252	87	152	110	100			96	102
Average speed (m.p.h.)		63.8	63.8	63.2	62.9	64.2	65.1			53.0	55.4
Standard deviation		5.98	6.20	6.30	6.31	5.70	5.80			6.79	7.21
24 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
29 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
34 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
39 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
44 m.p.h.		0.0	0.4	0.0	0.7	0.0	0.0			11.4	10.8
49 m.p.h.		1.5	2.0	1.2	3.3	1.3	0.0			28.1	20.6
54 m.p.h.		6.6	7.1	9.2	9.9	4.6	3.0			53.1	40.2
59 m.p.h.		20.8	13.7	26.4	19.7	16.4	17.0			84.4	66.7
64 m.p.h.		53.8	59.1	59.8	66.5	49.1	48.0			96.9	91.2
69 m.p.h.		84.3	84.9	83.9	88.8	84.6	79.0			100.0	99.0
74 m.p.h.		95.9	94.4	95.4	95.4	96.4	93.0			-	100.0
79 m.p.h.		100.0	97.6	100.0	98.0	100.0	97.0			-	-
84 m.p.h.		-	99.6	-	100.0	-	99.0			-	-
89 m.p.h.		-	100.0	-	-	-	-			-	-
No. of vehicles obs.		-	130	-	83	-	47			-	49
Average speed		-	63.7	-	62.9	-	65.0			-	51.6
No. of vehicles obs.		-	122	-	69	-	53			-	53
Average speed		-	63.8	-	62.8	-	65.2			-	59.0
All vehicles											
or vehicles traveling at or less than											
5000 pounds or more											
Bound											
5000 pounds or more											
Bound											



TABLE 8 SPEED DATA

Station 8 Highway U.S. 52 Location 1.0 Mile West of Klondike
 No. of Lanes 4 Type of Surface Asphaltic Concrete Weather Fair
 This Observation July 1, 1968 Last Previous Observation (Speed Report No. 85)
 Date July 1, 1968 Date August 17, 1967
 Time 9:30 A.M.-12:00 P.M. Time 1:10-3:10 P.M.

PASSENGER CARS												TRUCKS			
OBSERVATION	All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more				
	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present			
No. of vehicles obs.	280	266	147	153	133	113	97	101	32	25	65	76			
Average speed (m.p.h.)	65.0	65.1	64.0	64.3	66.2	66.2	54.8	57.3	56.0	57.6	54.2	57.1			
Standard deviation	6.80	5.74	6.64	5.88	6.81	5.34	5.90	7.2	6.17	8.26	5.72	6.82			
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	3.1	0.0	1.5	1.3			
44 m.p.h.	0.4	0.0	0.0	0.0	0.8	0.0	6.2	5.0	3.1	8.0	7.7	4.0			
49 m.p.h.	1.4	0.8	2.0	0.7	0.8	0.9	12.4	14.9	9.4	16.0	13.9	14.5			
54 m.p.h.	6.4	4.1	7.5	5.9	5.3	1.8	50.5	33.7	46.9	36.0	52.3	32.9			
59 m.p.h.	17.5	12.0	23.1	15.7	11.3	7.1	75.3	52.5	62.5	52.0	81.5	52.6			
64 m.p.h.	46.8	46.2	54.4	54.9	38.4	34.5	97.9	87.1	96.9	76.0	98.5	90.8			
69 m.p.h.	75.0	76.3	80.3	78.4	69.2	73.5	99.0	94.1	100.0	92.0	98.5	94.7			
74 m.p.h.	92.5	97.0	94.5	98.0	90.2	95.6	100.0	100.0	-	100.0	100.0	100.0			
79 m.p.h.	98.2	98.5	99.3	98.7	97.0	98.2	-	-	-	-	-	-			
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	-	-	-	-	-	-			
89 m.p.h.	-	-	-	-	-	-	-	-	-	-	-	-			
No. of vehicles obs.	-	122	-	77	-	45	-	35	-	9	-	26			
Average speed	-	65.5	-	64.4	-	67.3	-	56.8	-	56.1	-	57.0			
No. of vehicles obs.	-	144	-	76	-	68	-	66	-	16	-	50			
Average speed	-	64.8	-	64.1	-	65.5	-	57.5	-	58.5	-	57.2			



TABLE 9 SPEED DATA

Station 9 Highway U.S. 41 Location 1.0 Mile North of Boswell

No. of Lanes 2 Type of Surface Portland Cement Concrete Weather Fair

Date June 21, 1968 Last Previous Observation (Speed Report No. 85)

Time 9:00-11:30 A.M. Date August 17, 1967

Time 8:45-11:30 A.M.

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.	228	247	118	145	110	102	137	106	53	40	84	66
Average speed (m.p.h.)	59.6	59.5	58.6	58.7	60.6	60.7	48.8	53.5	50.2	52.8	47.9	54.0
Standard deviation	6.50	7.21	6.55	7.91	6.33	5.91	6.92	6.13	6.61	7.22	7.00	5.37
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.2	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.9	1.9	2.5	3.6	0.0
39 m.p.h.	0.4	0.0	0.0	0.0	0.9	0.0	10.2	1.9	7.6	5.0	11.9	0.0
44 m.p.h.	1.3	2.0	1.7	3.5	0.9	0.0	24.1	7.6	20.8	10.0	26.7	6.1
49 m.p.h.	6.6	9.3	9.3	13.1	3.6	3.92	48.9	22.6	39.6	25.0	54.8	21.2
54 m.p.h.	20.2	24.7	25.4	30.3	14.6	16.7	86.9	55.7	79.3	57.5	91.7	54.6
59 m.p.h.	46.1	47.0	50.9	51.0	40.9	41.2	94.2	82.1	92.5	82.5	95.2	81.8
64 m.p.h.	78.5	75.7	83.1	77.9	73.6	72.6	99.3	98.1	100.0	97.5	98.8	98.5
69 m.p.h.	94.7	92.3	97.5	90.3	91.8	95.1	100.0	100.0	-	100.0	100.0	100.0
74 m.p.h.	99.1	99.2	99.2	98.6	99.1	100.0	-	-	-	-	-	-
79 m.p.h.	100.0	99.6	100.0	99.3	100.0	-	-	-	-	-	-	-
84 m.p.h.	-	100.0	-	100.0	-	-	-	-	-	-	-	-
89 m.p.h.	-	-	-	-	-	-	-	-	-	-	-	-
No. of vehicles obs.	-	121	-	60	-	61	-	60	-	21	-	39
Average speed	-	60.7	-	60.3	-	61.2	-	54.0	-	52.7	-	54.8
No. of vehicles obs.	-	125	-	84	-	41	-	46	-	19	-	27
Average speed	-	58.5	-	57.8	-	59.9	-	52.9	-	52.9	-	52.9

TABLE 10 SPEED DATA

Station 10 Highway U.S. 43 Location 2.0 Miles South of Chalmers Weather Fair - Windy
 No. of Lanes 2 Type of Surface Asphaltic Concrete Last Previous Observation (Speed Report No. 85)
 Date June 21, 1968 Date August 21, 1967
 Time 2:00-5:00 P.M. Time 9:00-11:30 A.M.

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds or more		5000 pounds or more	
OBSERVATION		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
All vehicles % of vehicles traveling at or less than	No. of vehicles obs.	249	286	195	245	54	41	84	78	37	33	47	45
	Average speed (m.p.h.)	62.9	62.8	62.3	62.6	65.2	64.2	56.5	55.0	57.8	55.6	54.5	54.6
	Standard deviation	8.91	7.90	9.34	7.97	6.78	7.43	7.72	7.50	9.60	8.36	5.74	6.78
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	2.7	0.0	0.0	0.0
	39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	5.4	0.0	0.0	0.0
	44 m.p.h.	2.4	1.1	3.1	1.2	0.0	0.0	4.8	7.7	8.1	12.1	2.1	4.4
	49 m.p.h.	7.6	3.8	9.7	4.1	0.0	2.4	13.1	25.6	16.2	24.2	10.6	26.7
	54 m.p.h.	14.9	15.0	18.5	15.5	1.9	12.2	41.7	48.7	37.8	48.5	44.7	48.9
Bound	59 m.p.h.	31.7	31.1	35.4	32.7	18.5	22.0	64.3	69.2	56.3	60.6	70.2	75.6
	64 m.p.h.	59.4	61.9	62.1	64.1	50.0	48.8	83.3	89.7	70.3	87.9	93.6	91.1
	69 m.p.h.	80.7	81.8	81.0	82.5	79.5	73.1	92.2	93.7	89.2	97.0	100.0	100.0
	74 m.p.h.	90.4	92.0	90.8	91.8	88.9	92.7	98.8	98.7	97.3	97.0	-	-
	79 m.p.h.	96.8	97.2	96.9	97.1	95.3	97.6	100.0	100.0	100.0	100.0	-	-
	84 m.p.h.	98.8	99.0	99.0	98.8	98.2	100.0	-	-	-	-	-	-
Bound	89 m.p.h.	99.2	99.3	99.0	99.2	100.0	-	-	-	-	-	-	-
	No. of vehicles obs.	-	163	-	140	-	23	-	43	-	20	-	23
	Average speed	-	61.7	-	61.4	-	63.7	-	55.5	-	54.2	-	56.6
	No. of vehicles obs.	-	123	-	105	-	18	-	35	-	13	-	22
Average speed		-	64.3	-	64.2	-	64.8	-	54.4	-	57.7	-	52.5

TABLE 11 SPEED DATA

Station 11 Highway U.S. 31 Location 3.0 Miles South of Rochester Weather Cloudy
 No. of Lanes 2 This Observation Type of Surface Asphaltic Concrete Last Previous Observation (Speed Report No. 85)
 Date June 24, 1968 Date August 21, 1967
 Time 1:45-4:00 P.M. Time 1:30-3:30 P.M.

				PASSENGER CARS				TRUCKS			
OBSERVATION				All		Indiana		Non-Indiana		All	
No. of vehicles obs.	Average speed (m.p.h.)	Standard deviation	24 m.p.h.	Last	Present	Last	Present	Last	Present	Last	Present
				252	282	191	209	61	73	91	98
All vehicles at or less than	Average speed	62.6	61.8	62.5	61.2	63.1	63.5	63.1	63.5	55.0	54.6
	Standard deviation	7.08	7.09	7.24	6.96	6.57	7.21	6.57	7.21	5.81	6.85
	24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24 of vehicles traveling at or less than	Average speed	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
	Standard deviation	1.2	1.8	1.1	1.9	1.6	1.4	1.6	1.4	6.6	4.1
	24 m.p.h.	3.6	4.6	3.7	5.3	3.3	2.7	3.3	2.7	15.4	18.4
	29 m.p.h.	11.9	12.8	13.6	14.4	6.6	8.2	6.6	8.2	42.9	49.0
	34 m.p.h.	32.1	32.2	32.5	34.9	31.2	24.7	76.9	75.5	66.7	66.7
24 of vehicles traveling at or less than	Average speed	59.1	69.2	59.2	74.2	59.0	54.8	96.7	93.9	90.9	91.1
	Standard deviation	85.3	90.4	85.9	90.9	33.6	89.0	100.0	100.0	100.0	100.0
	24 m.p.h.	96.0	97.5	95.3	98.6	98.4	94.5	-	-	-	-
	29 m.p.h.	98.8	98.2	98.4	99.0	100.0	95.7	-	-	-	-
	34 m.p.h.	99.6	98.9	99.5	99.0	-	98.6	-	-	-	-
24 of vehicles traveling at or less than	Average speed	100.0	99.7	100.0	99.5	-	100.0	-	-	-	-
	Standard deviation	-	140	-	97	-	43	-	-	-	-
	24 m.p.h.	-	62.5	-	62.0	-	63.6	-	36	-	17
	29 m.p.h.	-	142	-	112	-	30	-	55.2	-	54.2
	34 m.p.h.	-	61.0	-	60.5	-	63.4	-	62	-	28
Bound											
No. of vehicles obs.											
Average speed											
No. of vehicles obs.											
Average speed											

TABLE 12 SPEED DATA

Station 12 Highway S.R. 25 Location 0.7 Miles West of Americus

No. of Lanes 2 This Observation of Surface Asphaltic Concrete Weather Fair

Date June 24, 1968 Last Previous Observation (Speed Report No. 85)

Time 10:00 A.M.-12:30 P.M. Date August 25, 1967

Time 10:00 A.M.-12:30 P.M. Time 1:30 A.M.-12:00 P.M.

PASSENGER CARS				TRUCKS			
OBSERVATION	All		Indiana		Non-Indiana		5000 pounds or more
	Last	Present	Last	Present	Last	Present	
No. of vehicles obs.	216	217	177	185	39	31	
Average speed (m.p.h.)	59.7	61.6	59.7	61.4	59.6	63.0	
Standard deviation	8.10	6.79	8.49	6.94	6.12	5.77	
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
39 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
44 m.p.h.	1.9	0.0	1.7	0.0	2.6	0.0	
49 m.p.h.	9.7	2.3	11.3	2.7	2.6	3.2	
54 m.p.h.	22.5	15.7	26.6	17.7	20.5	3.2	
59 m.p.h.	50.0	40.1	49.7	41.9	51.3	29.0	
64 m.p.h.	75.9	69.6	74.0	71.0	84.6	61.3	
69 m.p.h.	98.9	88.9	88.7	88.7	89.7	90.3	
74 m.p.h.	97.2	95.4	96.6	95.2	100.0	96.8	
79 m.p.h.	98.2	99.1	97.7	98.9	-	100.0	
84 m.p.h.	99.5	100.0	99.4	100.0	-	-	
89 m.p.h.	99.5	-	99.4	-	-	-	
No. of vehicles obs.	-	111	-	95	-	16	
Average speed	-	61.5	-	61.4	-	62.1	
No. of vehicles obs.	-	106	-	91	-	15	
Average speed	-	61.7	-	61.3	-	63.9	
All vehicles				TRUCKS			
No. of vehicles traveling at or less than	All		Less than 5000 pounds		5000 pounds or more		5000 pounds or more
	Last	Present	Last	Present	Last	Present	
No. of vehicles obs.	83	71	36	35	47	36	
Average speed	52.7	54.0	53.1	54.9	52.4	53.2	
Standard deviation	5.22	6.57	6.76	7.17	4.80	5.90	
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	
39 m.p.h.	0.0	1.4	0.0	2.9	0.0	0.0	
44 m.p.h.	4.8	7.0	5.6	11.4	4.3	2.8	
49 m.p.h.	28.9	22.5	27.8	22.8	29.8	22.2	
54 m.p.h.	61.5	52.1	61.1	40.0	61.7	63.9	
59 m.p.h.	90.4	77.5	83.3	71.4	95.7	83.3	
64 m.p.h.	98.8	95.8	97.2	94.3	100.0	97.2	
69 m.p.h.	100.0	98.6	100.0	100.0	-	97.2	
74 m.p.h.	-	100.0	-	-	-	100.0	
79 m.p.h.	-	-	-	-	-	-	
84 m.p.h.	-	-	-	-	-	-	
89 m.p.h.	-	-	-	-	-	-	
No. of vehicles obs.	-	36	-	18	-	18	
Average speed	-	55.1	-	54.9	-	55.3	
No. of vehicles obs.	-	35	-	17	-	18	
Average speed	-	52.9	-	54.9	-	51.1	

TABLE 13 SPEED DATA

Station 1, 2, 3, & 4 Highway Interstate Location See Individual Stations

No. of Lanes This Observation Type of Surface Last Previous Observation (Speed Report No. 85)

Date Time Date Time

OBSERVATION	PASSENGER CARS						TRUCKS					
	All			Indiana			Non-Indiana			All		
	Last	Present	Last	Last	Present	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.	1051	1168	653	742	426	426	398	426	426	444	80	100
Average speed (m.p.h.)	67.1	66.3	66.4	66.1	67.9	67.9	68.3	67.9	60.5	58.5	60.0	60.5
Standard deviation	6.96	6.26	6.36	6.24	5.98	5.98	6.97	5.98	7.55	5.85	7.55	7.27
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
44 m.p.h.	0.0	0.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.0
49 m.p.h.	0.8	1.0	0.3	1.5	0.3	0.2	0.3	0.2	8.2	6.1	10.0	6.0
54 m.p.h.	4.6	3.3	5.1	4.2	3.3	1.9	3.3	1.9	27.0	22.1	23.3	20.0
59 m.p.h.	13.2	10.9	15.0	12.1	10.3	8.7	10.3	8.7	62.4	55.9	46.3	42.0
64 m.p.h.	34.3	33.4	38.0	37.5	28.1	26.3	28.1	26.3	91.6	87.4	73.8	72.0
69 m.p.h.	62.2	66.9	67.3	71.0	53.0	59.6	53.0	59.6	97.4	97.5	88.3	90.0
74 m.p.h.	86.7	91.6	88.5	93.0	83.7	89.2	83.7	89.2	99.5	99.3	97.5	98.0
79 m.p.h.	96.5	97.9	96.8	98.5	96.0	96.7	96.0	96.7	99.8	99.8	98.8	99.0
84 m.p.h.	99.8	99.7	99.7	99.7	99.0	99.8	99.0	99.8	100.0	100.0	100.0	100.0
89 m.p.h.	99.8	99.8	99.8	99.7	100.0	100.0	100.0	100.0	-	-	-	-

TABLE 14 SPEED DATA

Station 5, 6, 7, & 8 Highway 4 Lanes See Individual Stations Location See Individual Stations Weather 85

No. of Lanes 4 This Observation 4 Type of Surface 4 Last Previous Observation (Speed Report No. 85)

Date 4 Date 4 Time 4 Time 4

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.	969	1103	559	728	410	375	404	358	116	91	288	267
Average speed (m.p.h.)	65.0	64.9	64.4	64.2	65.7	66.2	54.9	56.2	57.0	58.4	54.1	55.4
Standard deviation	6.44	6.15	6.64	6.31	6.09	5.61	6.75	6.93	7.35	7.20	6.31	6.68
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 m.p.h.	0.0	0.1	0.0	0.1	0.0	0.0	1.2	0.8	0.9	0.0	1.7	1.1
44 m.p.h.	0.5	0.4	0.7	0.5	0.2	0.0	7.2	6.4	4.3	3.3	8.3	7.5
49 m.p.h.	1.4	1.2	2.0	1.5	0.7	0.5	19.6	17.0	16.4	12.1	20.8	18.7
54 m.p.h.	5.6	4.8	6.6	6.3	4.2	1.9	46.5	39.1	39.7	29.7	49.3	42.3
59 m.p.h.	16.5	15.7	20.0	18.0	11.7	11.2	73.3	65.9	59.5	51.7	78.8	70.8
64 m.p.h.	45.3	48.9	49.6	54.7	39.5	37.6	93.8	89.7	85.3	78.0	97.2	93.6
69 m.p.h.	77.4	77.3	79.3	80.7	74.9	72.0	98.5	97.2	96.6	94.5	99.3	98.1
74 m.p.h.	94.4	95.6	95.0	96.0	93.7	94.7	100.0	100.0	100.0	100.0	100.0	100.0
79 m.p.h.	98.7	98.4	98.9	98.5	98.3	98.1	-	-	-	-	-	-
84 m.p.h.	99.8	99.8	99.8	99.9	99.8	99.7	-	-	-	-	-	-
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	-	-	-	-	-	-

All vehicles

8 of vehicles traveling at or less than

TABLE 15 SPEED DATA

Station 2, 10, 11, 12 Highway 2 Lanes Location See Individual Stations

No. of Lanes This Observation Type of Surface Last Previous Observation (Speed Report No. 85) Weather

Date Date

Time Time

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.	945	1032	681	785	264	247	395	353	159	153	236	200
Average speed (m.p.h.)	61.3	61.5	61.0	61.2	61.2	62.4	52.7	54.3	53.2	54.4	51.9	54.2
Standard deviation	7.86	7.38	8.25	7.57	6.72	6.69	7.22	6.72	7.66	7.80	6.81	5.79
24 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.7	0.4	0.0
34 m.p.h.	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.9	1.3	2.0	1.3	0.0
39 m.p.h.	0.1	0.1	0.0	0.1	0.4	0.0	4.1	1.7	3.8	3.9	4.2	0.0
44 m.p.h.	1.7	1.3	1.9	1.5	1.1	0.4	11.9	6.5	10.7	9.8	12.7	4.0
49 m.p.h.	6.8	5.1	8.4	5.7	2.7	3.2	29.4	22.1	25.8	23.5	31.8	21.0
54 m.p.h.	17.8	16.9	20.4	18.5	11.0	11.7	61.8	51.5	56.6	48.4	65.3	54.0
59 m.p.h.	39.5	37.1	41.0	38.9	35.6	31.6	82.0	76.9	76.7	70.6	87.3	81.0
64 m.p.h.	67.7	68.8	68.0	71.0	67.1	61.9	95.2	94.6	90.6	92.8	98.3	96.0
69 m.p.h.	87.2	83.2	87.2	87.6	87.1	99.9	99.0	99.4	97.5	99.4	100.0	99.5
74 m.p.h.	95.6	95.9	95.0	95.7	96.9	96.3	99.8	99.7	99.4	99.4	-	100.0
79 m.p.h.	98.4	98.5	98.1	98.5	99.2	98.4	100.0	100.0	100.0	100.0	-	-
84 m.p.h.	99.5	99.4	99.5	99.4	99.6	99.6	-	-	-	-	-	-
89 m.p.h.	99.7	99.7	99.6	99.6	100.0	100.0	-	-	-	-	-	-

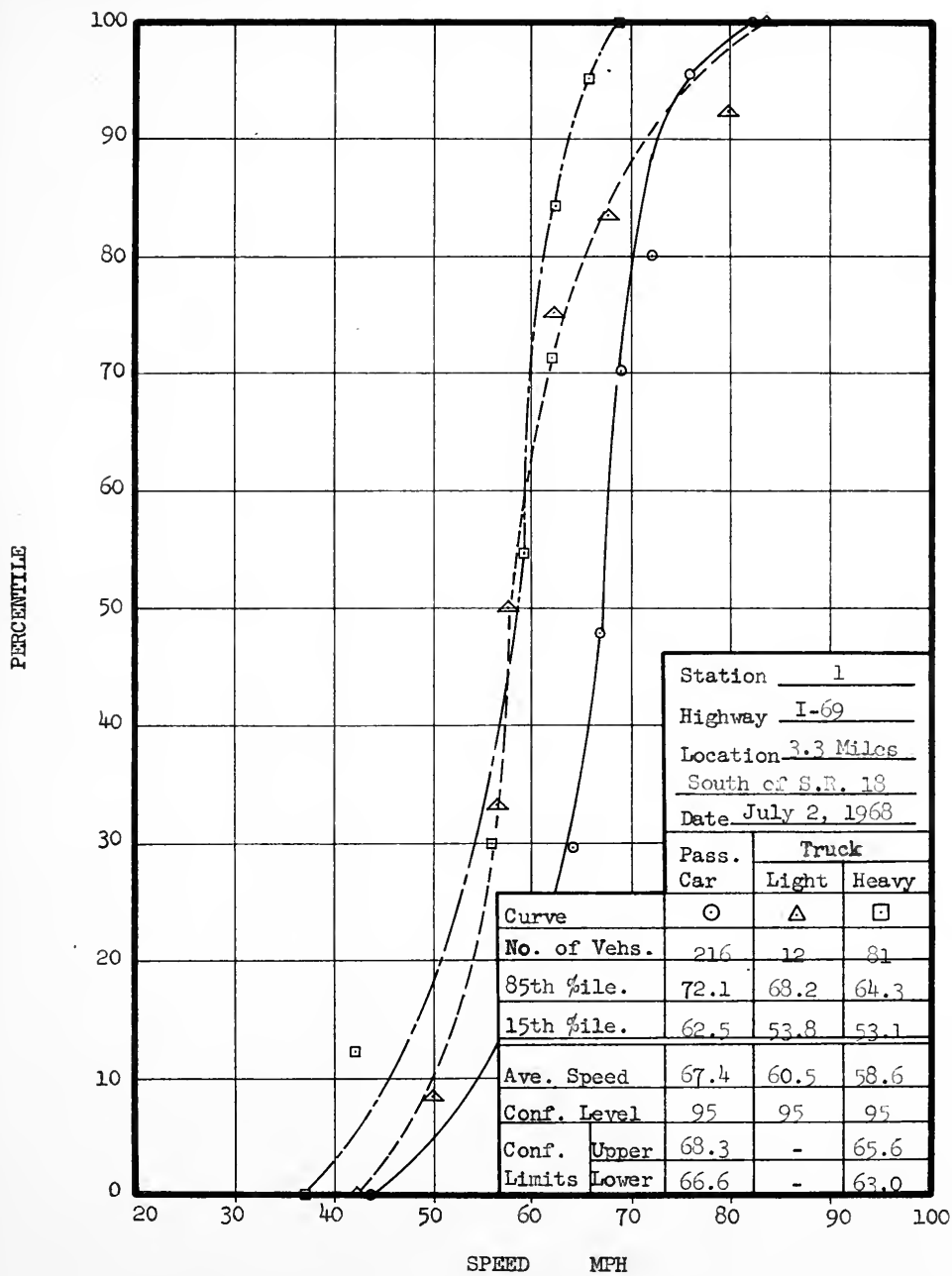
All vehicles
3 of vehicles traveling
at or less than

TABLE 16 SPEED DATA

Station 1 Thur 12 Highway All Systems Location See Individual Stations Weather 35
 No. of Lanes This Observation Type of Surface Last Previous Observation (Speed Report No. 35)
 Date Date
 Time Time

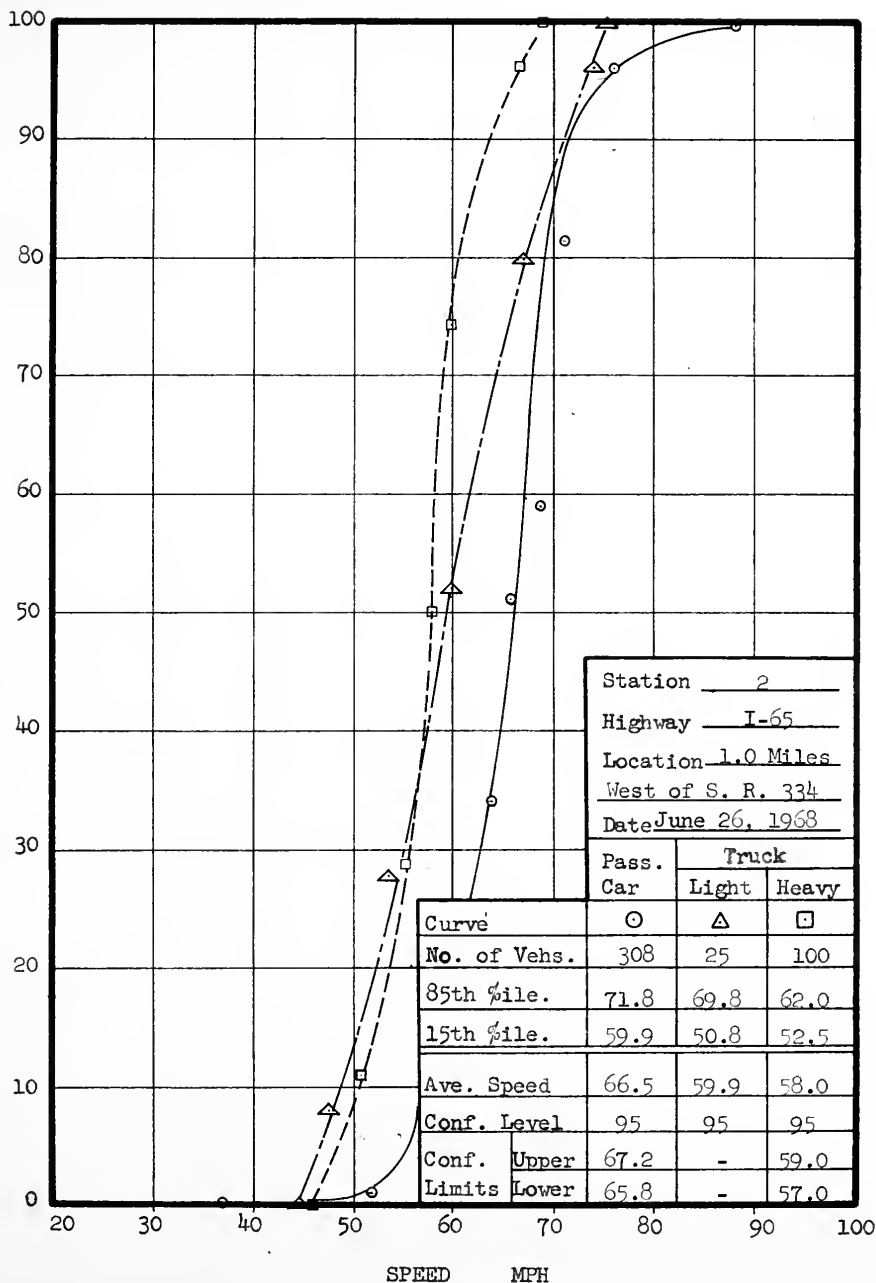
OBSERVATION		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		Less than 5000 pounds		5000 pounds or more	
		Last	Present	Last	Present	Last	Present	Last	Present	Last	Present	Last	Present
No. of vehicles obs.		2965	3303	1893	2255	1072	1048	1225	1155	355	344	870	811
Average speed (m.p.h.)		64.6	64.5	63.9	63.8	65.2	66.0	55.1	56.5	56.3	57.2	54.6	56.2
Standard deviation		7.50	6.94	7.68	7.08	7.02	6.39	6.90	6.70	7.89	7.93	6.40	6.08
24 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.1	0.0
34 m.p.h.		0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.6	0.9	0.5	0.0
39 m.p.h.		0.0	0.1	0.0	0.1	0.1	0.0	2.1	0.9	2.3	1.7	2.1	0.5
44 m.p.h.		0.7	0.7	0.7	0.9	0.4	0.0	6.8	4.5	6.2	5.5	7.0	4.1
49 m.p.h.		2.9	2.4	3.9	3.0	1.2	0.1	18.3	14.4	19.2	15.4	18.6	13.9
54 m.p.h.		9.1	8.1	11.0	9.3	5.7	4.2	44.7	36.4	43.7	35.2	45.1	36.9
59 m.p.h.		22.7	20.7	25.3	23.3	17.1	15.0	72.7	65.3	64.2	57.3	76.1	68.7
64 m.p.h.		48.5	46.5	52.2	54.7	42.1	38.7	93.5	90.3	85.1	82.8	96.9	93.5
69 m.p.h.		75.1	77.2	79.2	80.0	69.8	71.2	98.3	98.0	95.2	95.4	99.5	99.1
74 m.p.h.		92.0	94.3	92.8	94.9	90.3	92.9	99.8	99.7	99.2	99.1	100.0	99.9
79 m.p.h.		97.9	98.2	97.9	98.5	97.7	97.6	99.9	99.9	99.7	99.7	-	100.0
84 m.p.h.		99.6	99.7	99.6	99.7	99.4	99.7	100.0	100.0	100.0	100.0	-	-
89 m.p.h.		99.8	99.8	99.8	99.8	99.2	100.0	-	-	-	-	-	-
All vehicles													
% of vehicles traveling at or less than													
% of vehicles traveling at or less than													

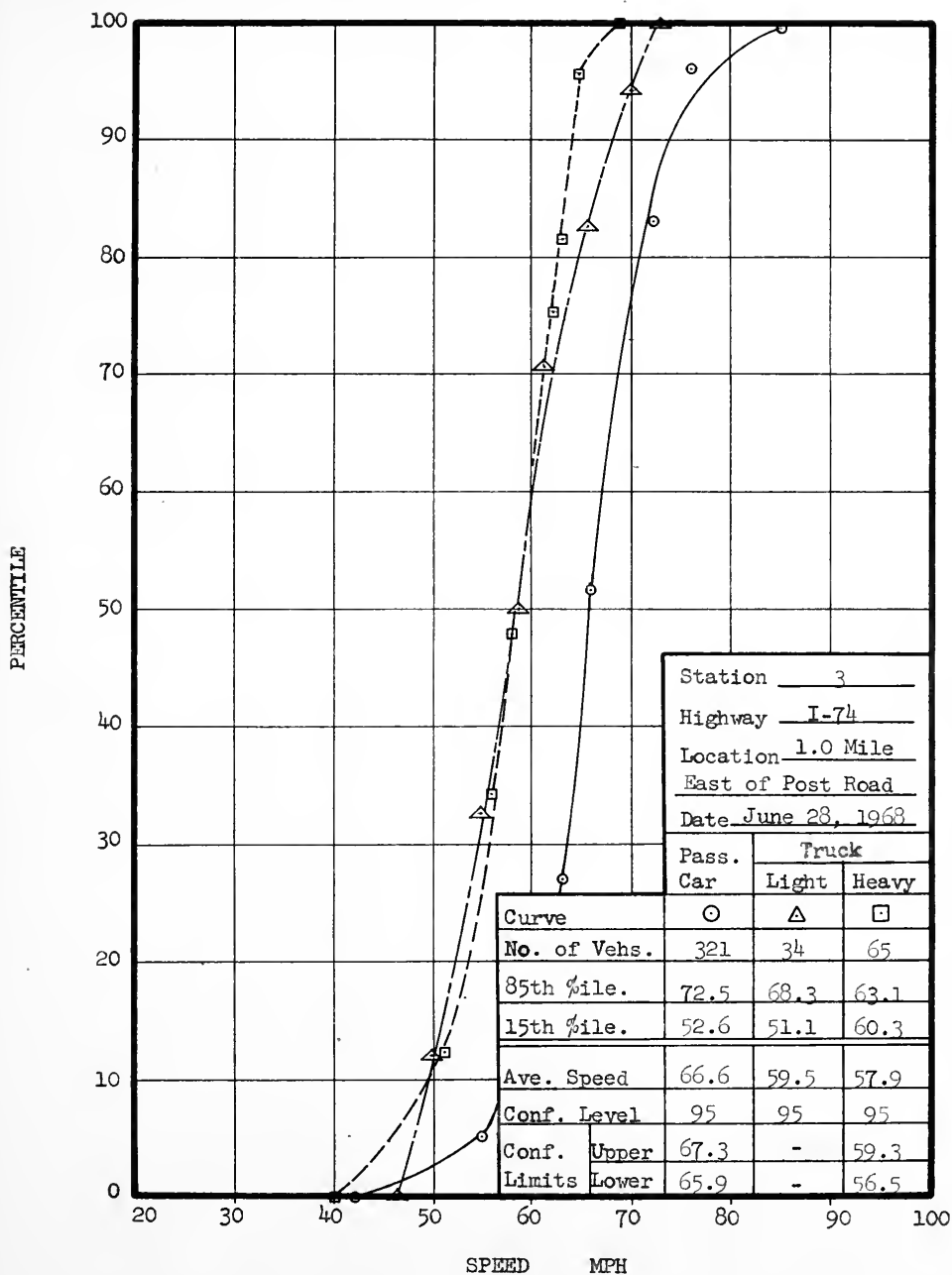




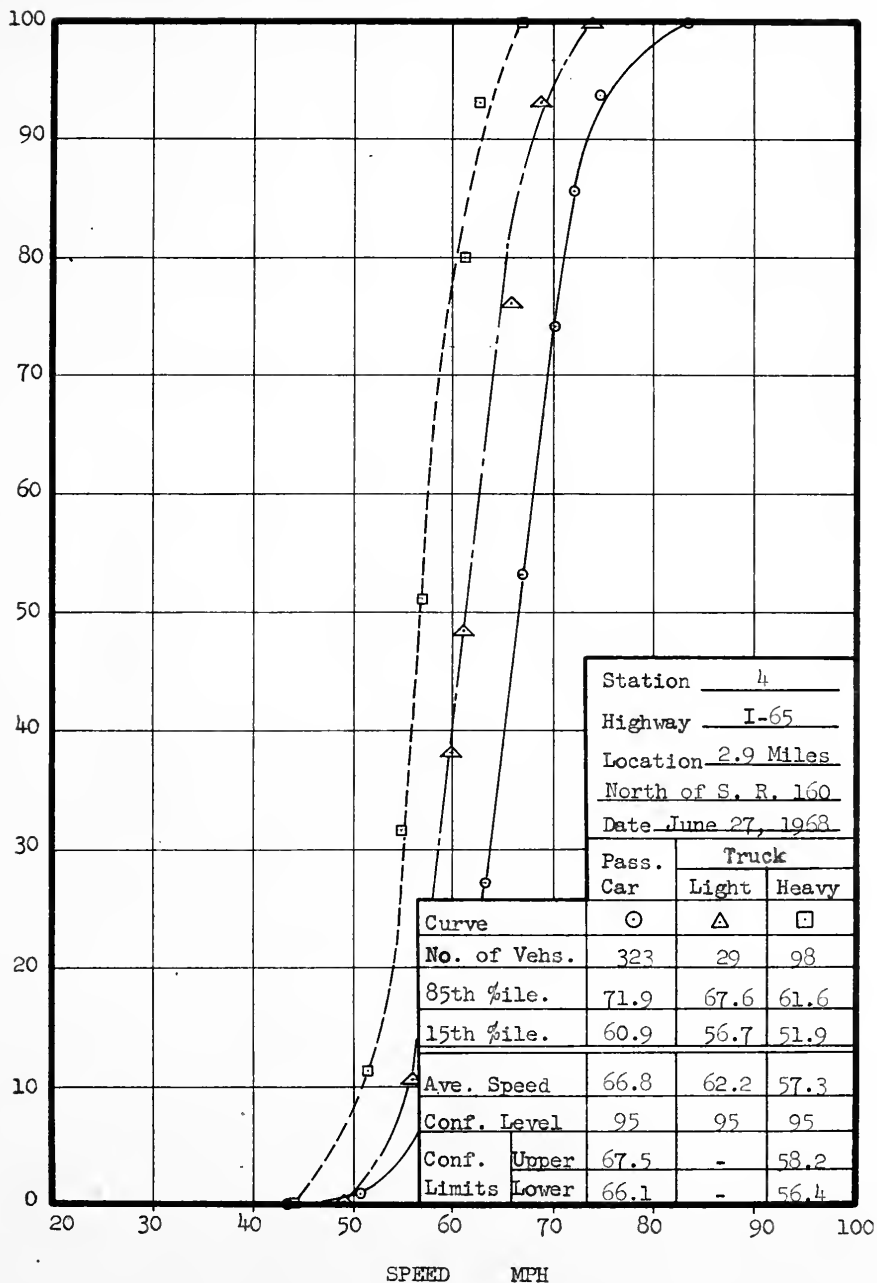


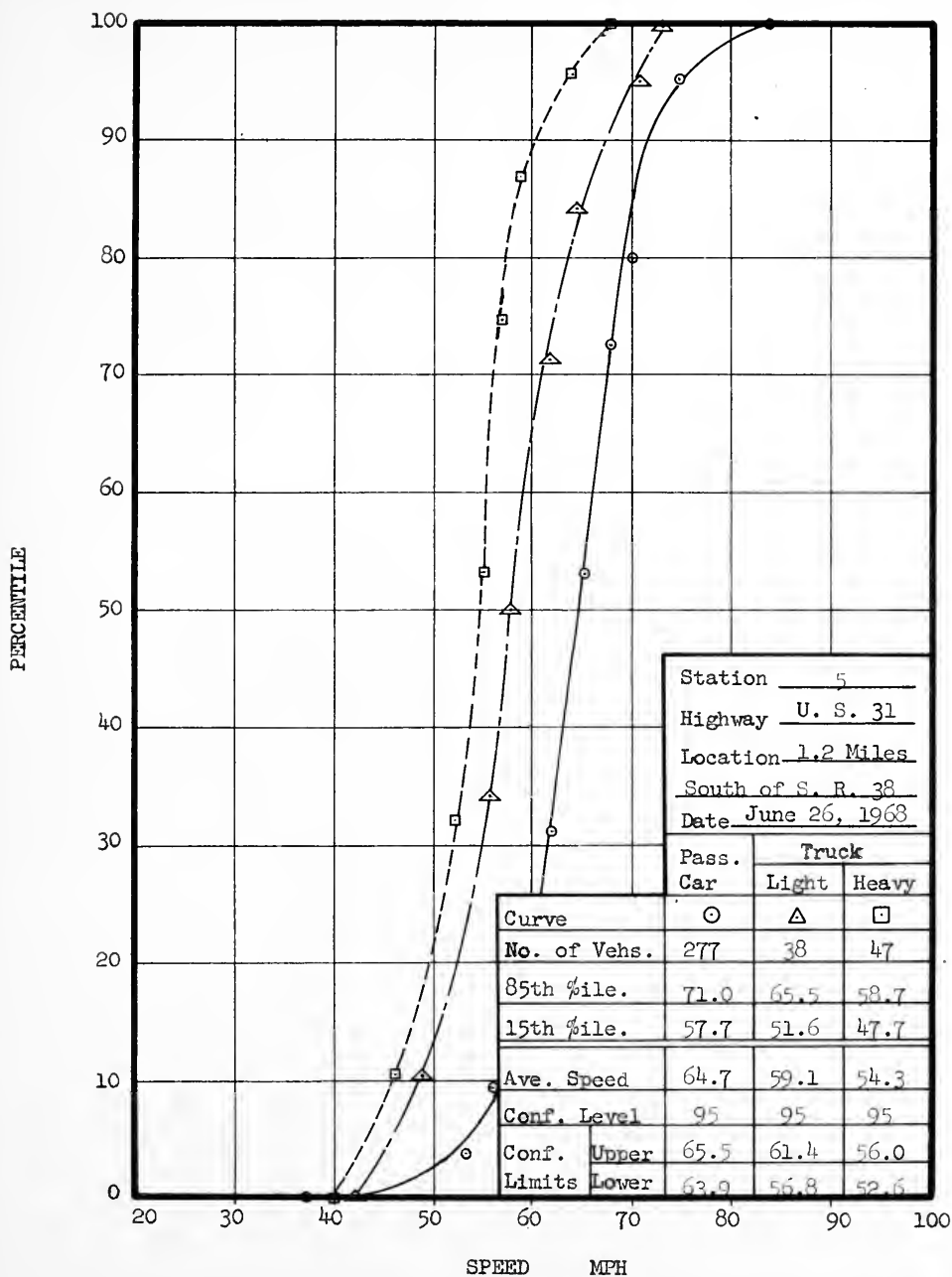
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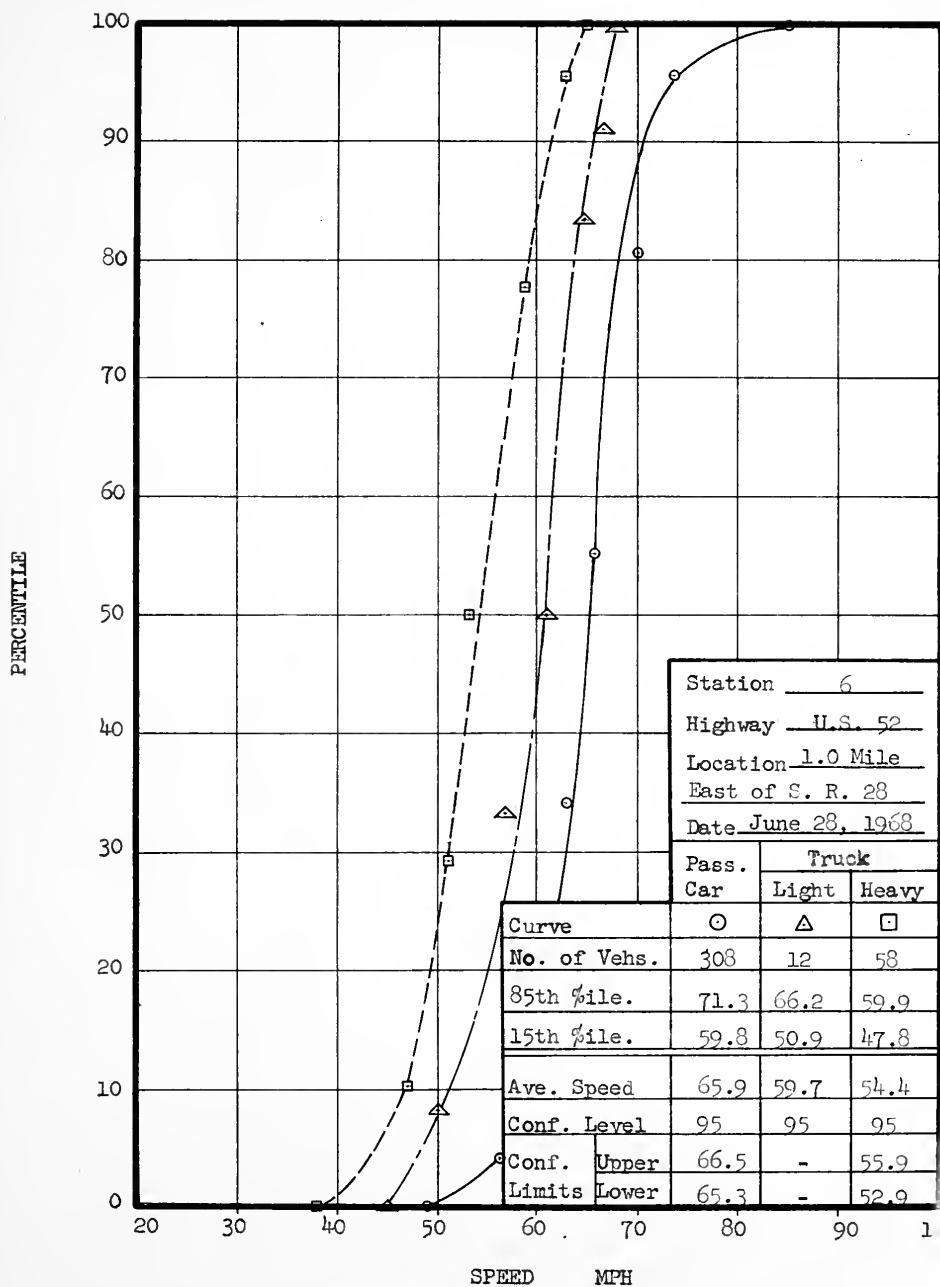


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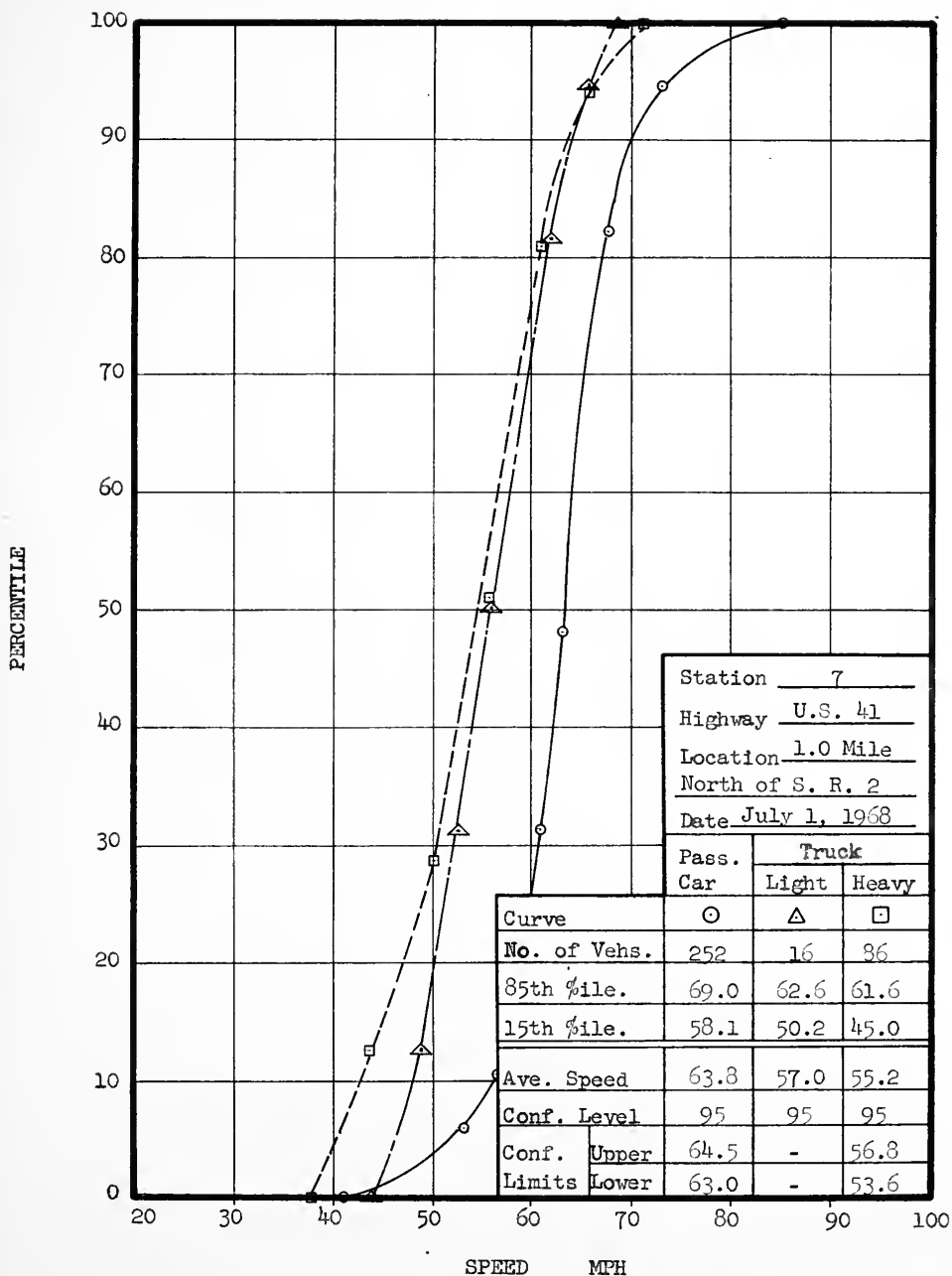


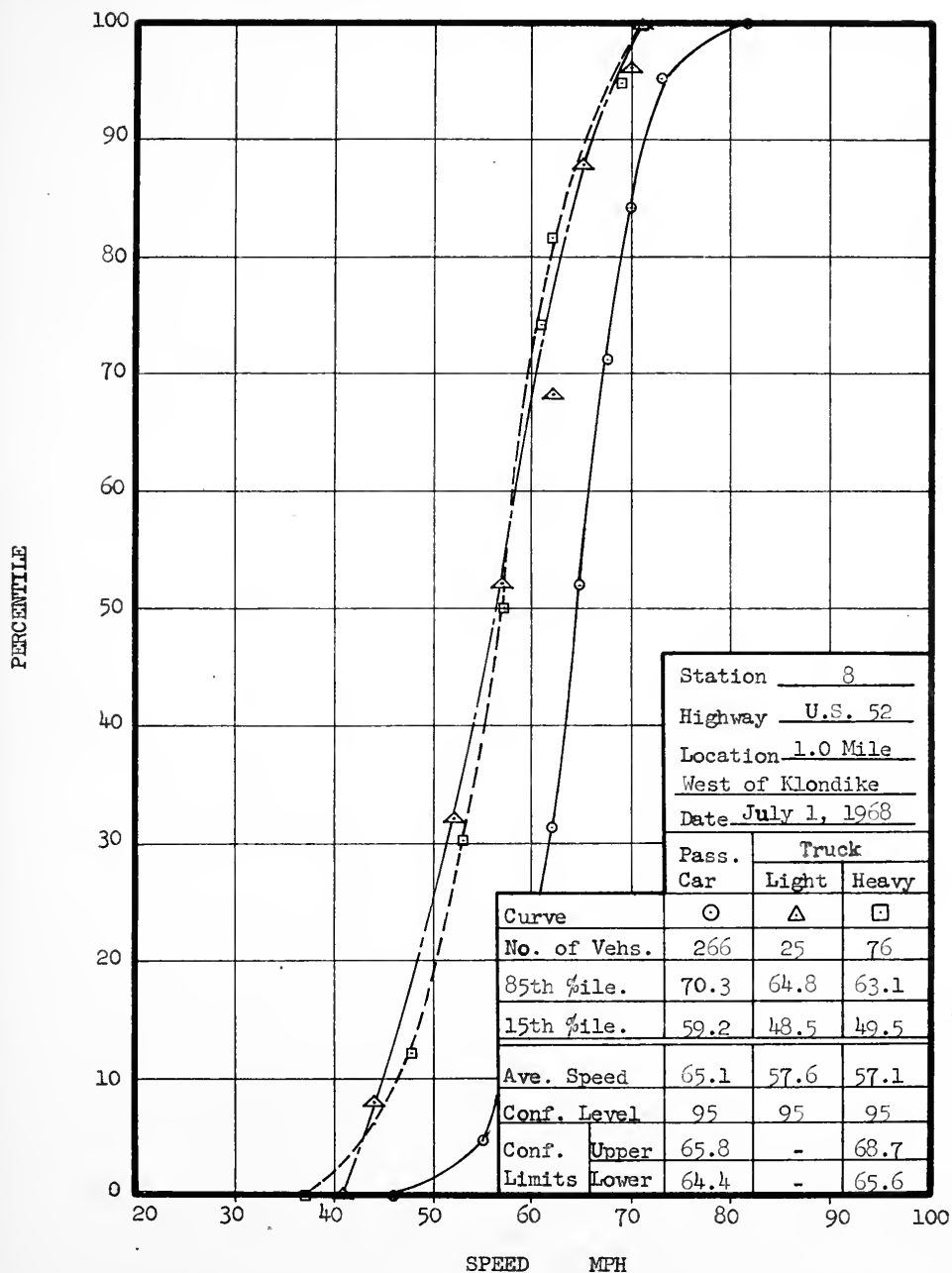


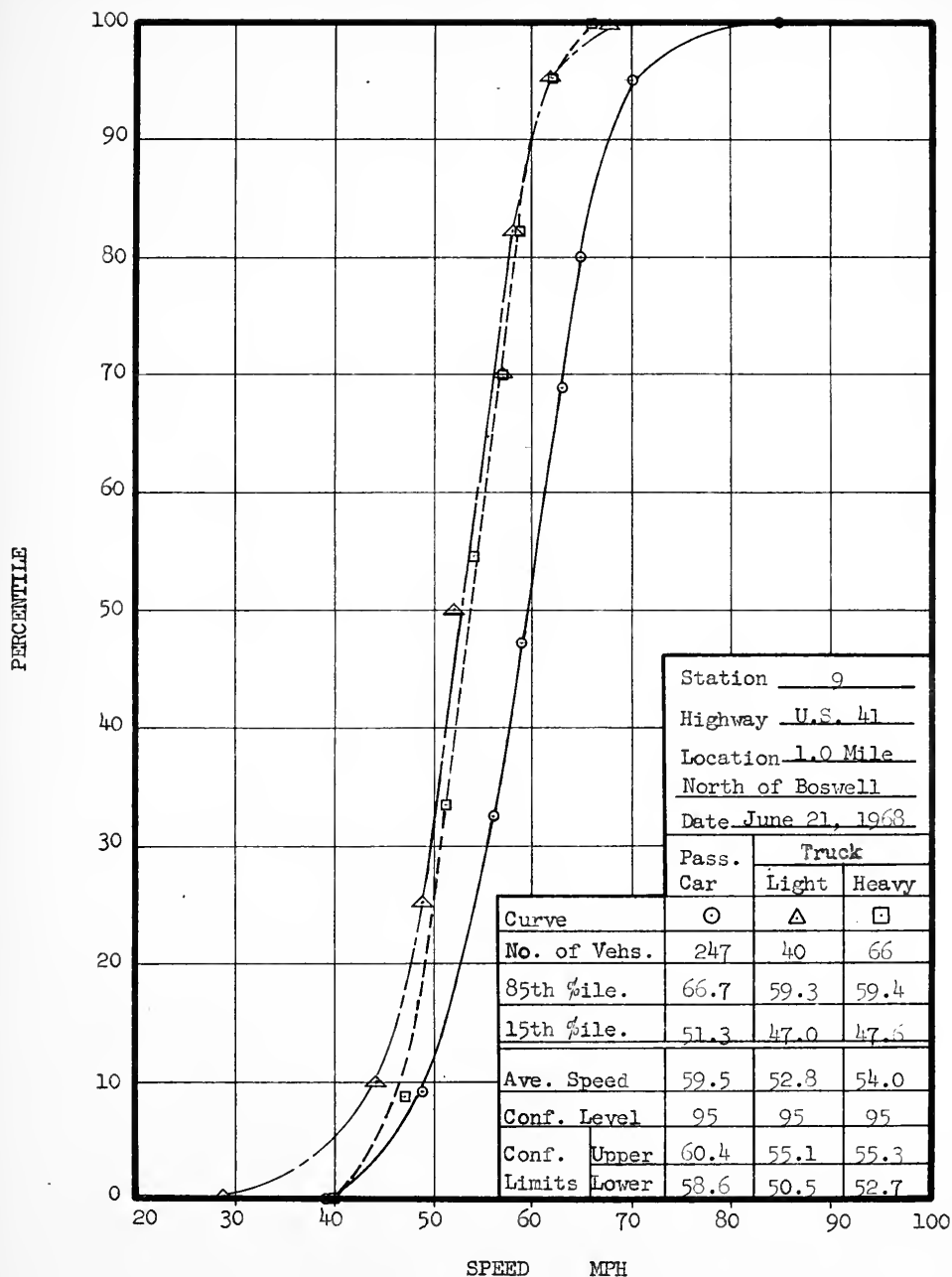


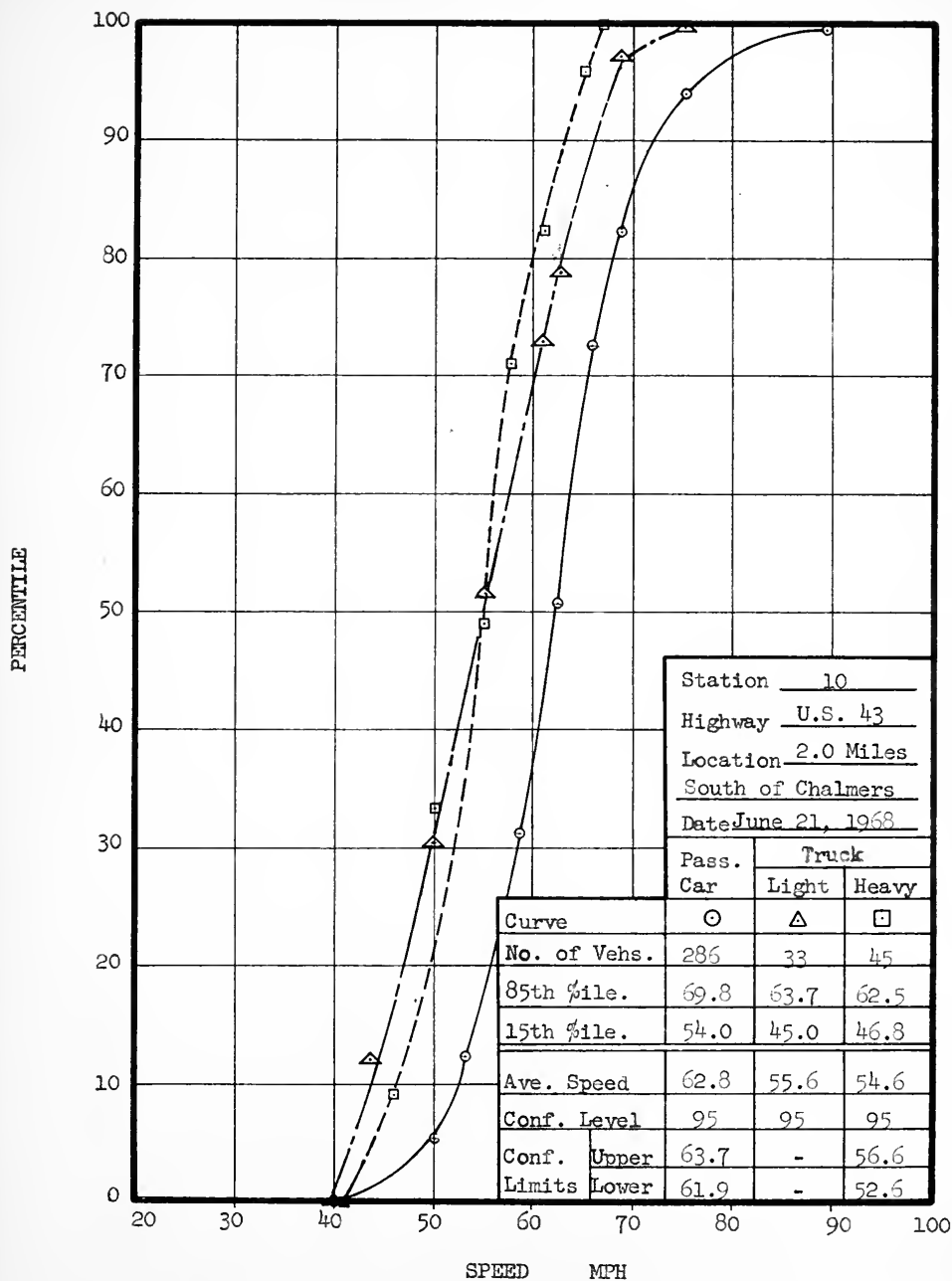


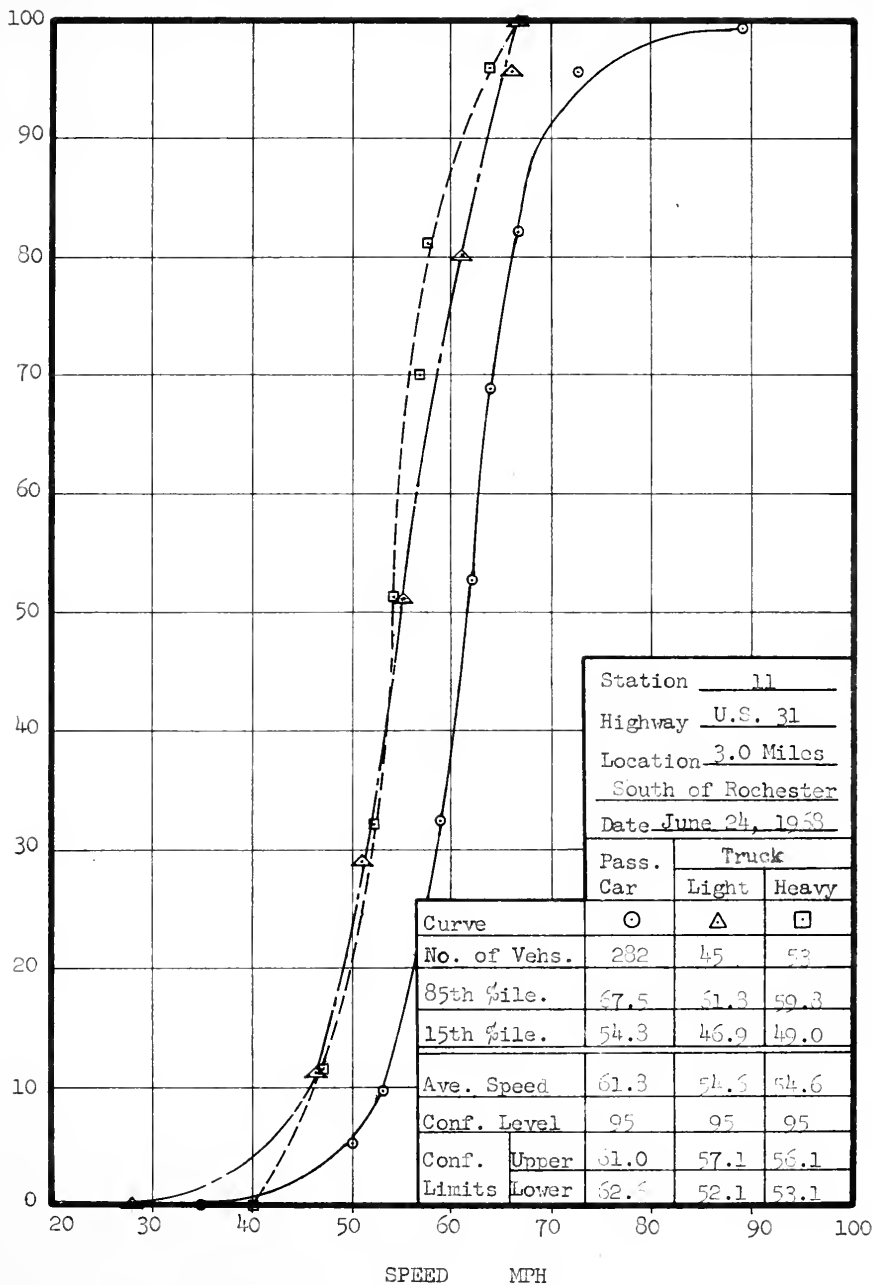




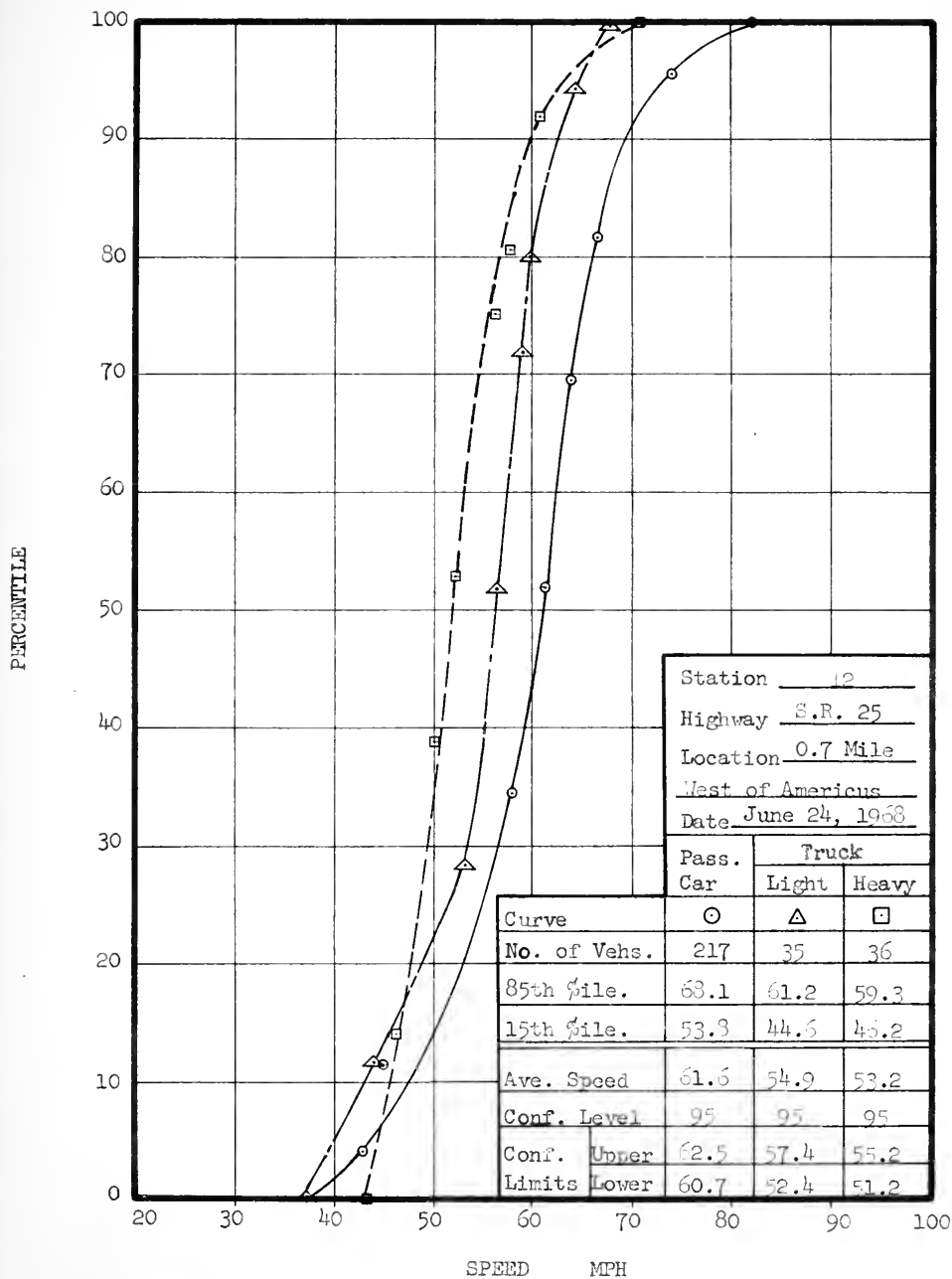




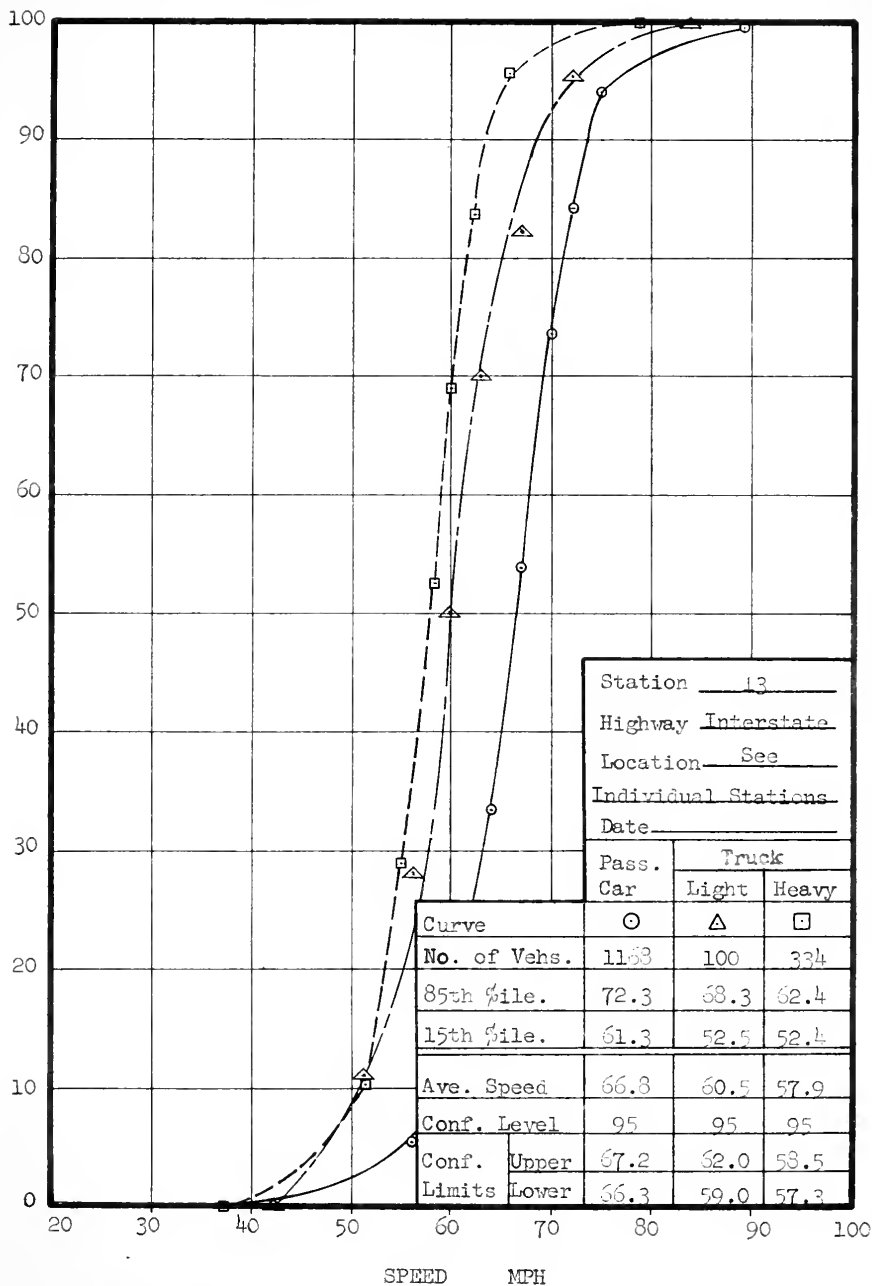




SPEED MPH

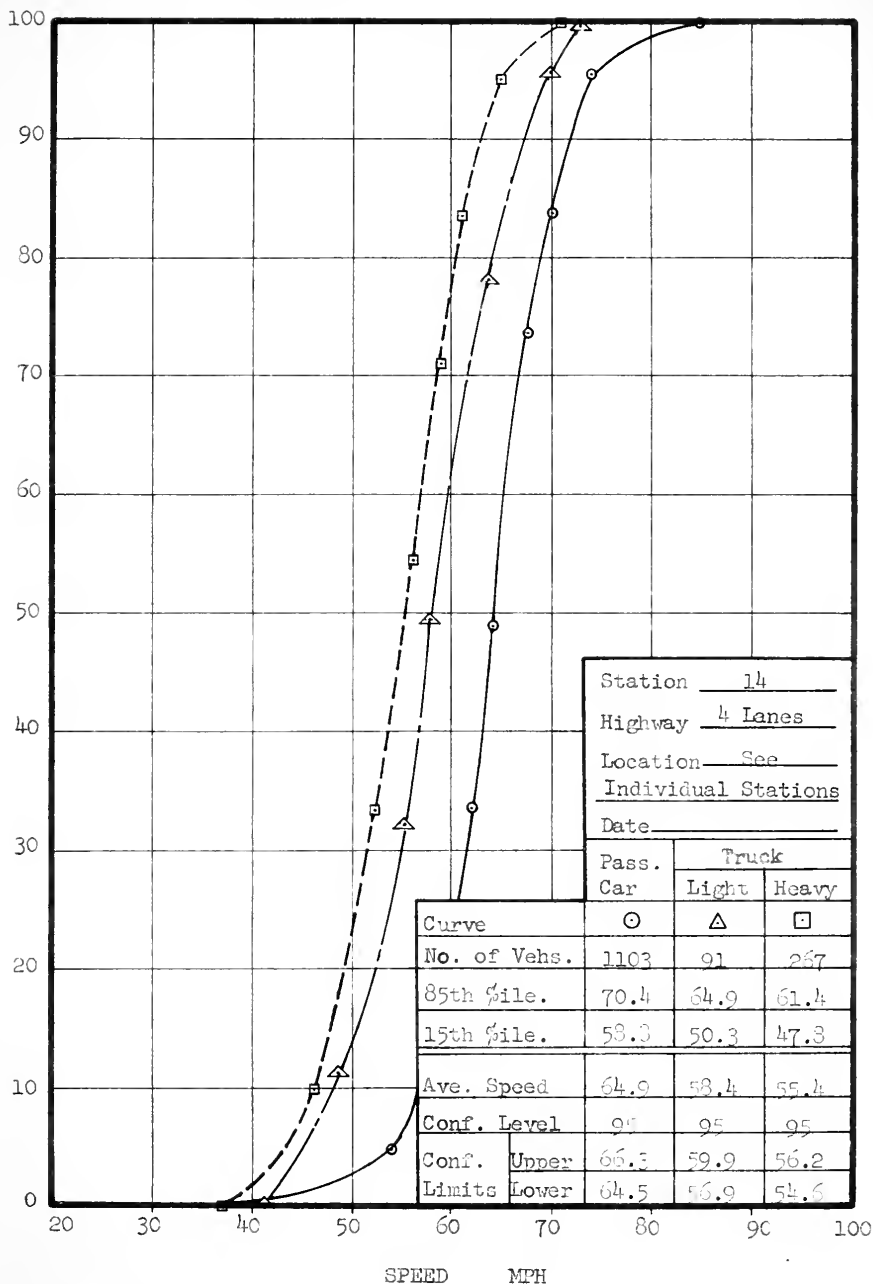


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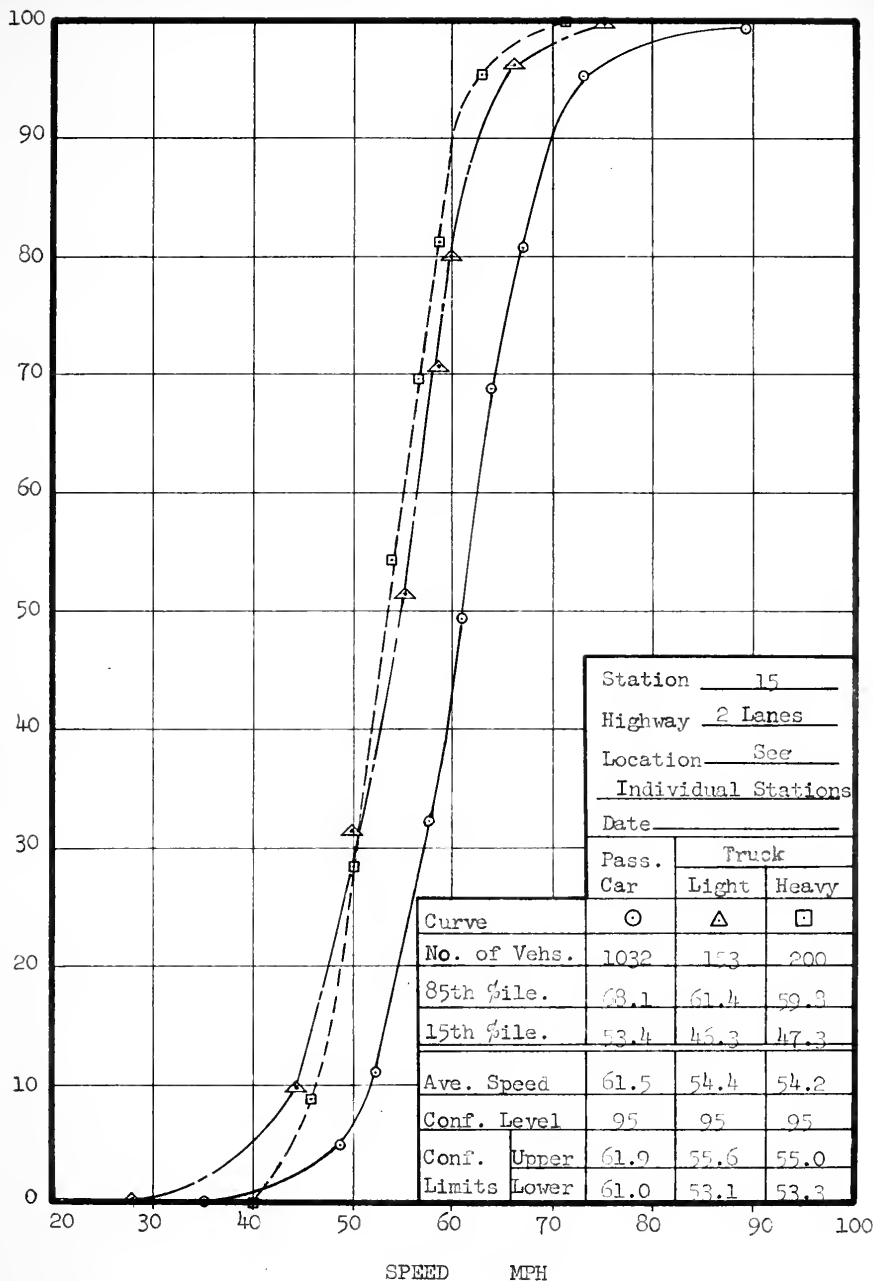
SPEED MPH

PERCENTILE



SPEED MPH

PERCENTILE



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